BUSINESS WEEK

A MICHAW-HILL PUBLICATION



Raymond M. Foley: Keeps world's biggest housing program on an even foundation (page 6)

BUSINESS WEEK NDEX

230 **-**220 **-**210 **-**

190-

150-

110-

70 **-**

40 -30 -20 -

TWENTY FIVE CENTS

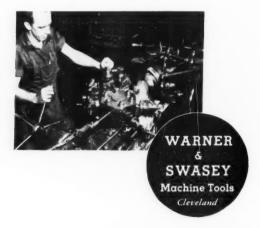
Let's pass a law to make everybody rich

WHENEVER there is the slightest down-turn in prosperity, some people rush to correct it by passing laws. Right now the hue and cry is to "keep up the buying power" by more pay for less work, and higher wages with no corresponding obligation.

That is not going to make jobs and prosperity. Buying power isn't money, it's production—it's creating clothing and houses and cars—it's the things people want. I have more buying power if I produce more of the things you want, to trade for more of what you make.

If dollars made prosperity, we would only have to pass a minimum wage law of \$50,000 a year. Think of the buying power! Everyone would be rich and therefore, of course, happy. Especially the smart planners who want to regulate our lives for us.

But with no incentive any more to earn and profit, there would be no production. And with huge quantities of dollars in everyone's hands, the dollars would soon cease to buy anything. So everybody would soon starve to death. Even the planners.





First step toward an automobile

A typical example of B.F.Goodrich product improvement

THAT picture, taken 1200 feet underground, shows iron ore that in a few weeks will become a steel automobile body. The moving belt collects the iron ore (often in chunks too big for any man to lift) and carries it up and out—cheaper, faster than the old car-and-locomotive method.

But the belts take a terrific bearing — iron ore is not only heavy but lumps also have sharp, cutting edges. Repairs to belts that far underground would be costly, almost impossible. The mine superintendent who decided on this

belt chose B.F.Goodrich because of this company's long history of making belts for "impossible" jobs.

BFG engineers developed a belt to meet these harsh conditions, with extra thick, cushioning cover. It has already been running a year with no slightest sign of wear. Miners and owners both prefer it over old methods, and cost of mining is the lowest that mine ever knew.

Reducing costs for business is our business. B. F. Goodrich improvements in products have resulted in V belts which outlast previous belts 2 and even 3 times, rubber linings which reduce the cost of handling acid and at the same time protect workers from injury, hose which reduces cost of drilling oil wells because it lasts so much longer—and hundreds of other product improvements which have benefited every industry. For latest cost-saving ideas in rubber, call your B.F. Goodrich distributor or write The B.F. Goodrich Company, Industrial and General Products Division, Akron, Ohio.

B.F. Goodrich



For Big, Important Jobs, Industry Relies on A-C's 102 Years' Experience!

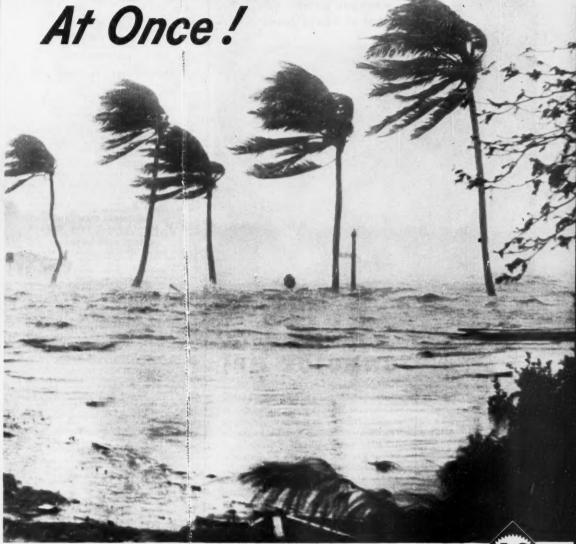


World's leading builder of rotary kilns and associated cement making machinery is Allis-Chalmers. Kilns marked "A-C" turn out a major part of all of America's cement. Longest water supply pipeline in Southern California—481 miles gets a 144-ft. lift from A-C equipped pumping station. Ten-year service record shows negligible maintenance.



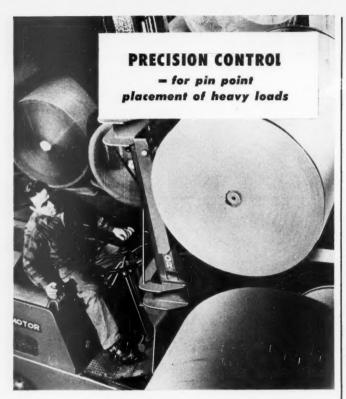


Fastest method of gluing curved plywood drawer fronts! Allis-Chalmers Dielectric Heater reduces gluing time to 3 minutes—requires far fewer forms—reduces cost 30%. Widest in range of industrial products— Allis-Chalmers serves every basic industry contributing to your good living today. NEW SEA WALL -



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Product development at Rockwell is guided and controlled by a Products Committee made up of key members of the executive staff. Each man in this group analyses new product potentialities in the light of his own specialized knowledge. Committee members must agree that the development is sound before activity may start.

Pre-testing products, even before the drawing board stage, is a "big business" function that Rockwell makes available to the 17 small businesses that comprise the Rockwell group.

The chief value of this staff operation goes to Rockwell customers to whom better performing, more efficient products are being constantly made available at minimum cost.

The Biggest Small Business in America"

MANUFACTURING COMPANY PITTSBURGH 8, PA.



Thanks to B-W Engineers' development of the Rockford over-center clutch for tractors

Today the man who operates a farm tractor equipped with this new type Rockford clutch has power control never before possible. He can stop the tractor dead in its tracks and go right on taking off power for his harvesting machine or his hydraulic system . . . or he can propel the tractor with the "take-off power" cut off.

More and more farm tractors are being equipped with Rockford over-center clutches. More and more farmers are becoming "Power Kings on a Tractor Seat."

This is just one more Borg-Warner contribution to make farm operations more efficient and more economical.

Today 50% of all Americanmade tractors are equipped

> with clutches made by the Rockford Clutch Division of Borg-Warner Corporation.



Almost every American benefits every day from the 185 products made by BORG-WARNER



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THE COVER

When Congress at the end of June signaled its approval of the government's giant public-housing and slum-clearance program, veteran opponents among private builders grasped at one consolation. The National Assn. of Home Builders told its members that they were fortunate in having Raymond Michael Foley, administrator of the Housing & Home Finance Agency, to run the huge operation for the government.

• Reputation—That judgment pretty well sums up the feeling of the housing fraternity—both public and private. Fourteen years in housing posts for the government have gained Foley a reputation as a capable manager and a man unbiased as between private and public housing.

Under the new public-housing law, Folcy will administer government aids that may generate up to \$10-billion of spending at local sites. In his usual calm, judicious manner, he is building up a compact organization to supervise this mammoth addition to his labors.

• Background—After 20 years in newspaper work, Foley moved into public life in 1934. He took a post with the newly created FHA as state director for Michigan. On that job he had charge of priorities for war housing in the Detroit area.

President Truman was then chairman of the Senate war investigating committee. He was so impressed with Foley's work that he brought him to Washington in 1945 to head FHA.

Foley's down-to-earth, human handling of his duties won him the post of Housing Expediter after Wilson Wyatt resigned at the end of '46. He has stayed at the top through reorganizations, as administrator first of NHA and now of HHFA. The Republicancontrolled 80th Congress thought enough of him to give him a substantial boost in salary when it made HHFA permanent.

-Cover photograph by Harris & Ewing.



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That's because they knock out the payroll fifty percent faster with this remarkable machine. It's the "one shot" writing of several related records that makes payroll work an absolute breeze. In one simple operation you insert statement of earnings, payroll check and employee earnings record ... type your items rapidly on the finger-fitted keyboard with the single set of touch-method numeral keys . . . and it's complete. Net pay is printed and computed automatically—you're ready for the next employee record in seconds!

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YOURS . . . FREE FOR THE ASKING—Illustrated brochure describes the advantages of the Foremost Bookkeeping Machine

in detail—shows how you can really save on accounting costs. Phone your Remington Rand office for "Fashioned for Business Administration", or write to Remington Rand Inc., Dept. BW-9, New York 10.



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Here's One High Cost that's "Asking For" DRASTIC ACTION on Your Part!

WTHEN critically examining your costs of doing business and seeking more profitable operation, remember that NO ONE HAS A VESTED INTEREST IN HIGH EYE ACCIDENT COSTS! These costs can be cut drastically now.

98% of all industrial eye injuries can be prevented when shop workers wear safety goggles, according to the Society for the Prevention of Blindness. Individual case histories show that American Optical Company eye protection programs have saved sums like these: (1) \$16,607 in eight years (2) \$14,000 in two years (3) \$44,200 annually.

Your nearest AO Safety Products Representative will be glad to explain the AO program, which may produce similar savings for you. Ask him for complete details.



Southbridge, Massachusetts . Branches in Principal Cities

BUSINESS OUTLOOK

BUSINESS WEEK SEPTEMBER 10, 1949



Business prospects now hinge on steel. All bets are off until something happens on wages—one way or the other.

Steel output is holding up very well, meantime. Despite slight Labor Day production losses, the industry was running at 84.2% of capacity this week (page 19). And the outlook seems good—always barring a walkout.

Steel scrap prices are rising about on schedule (BW-Aug.27'49,p10).

It has been obvious for some time that mills were a mite afraid they would run short. But they weren't scrambling to buy; in fact, they aren't yet. But a little demand sends prices up with the greatest of ease.

Iron Age's composite, at \$43.16 a year ago, hit a low of \$19.33 a ton this summer. The middle of this week it was back up to \$23.92.

Probably scrap tumbled too far when steel output overtook demand.

Demand for steel has held up so well that everyone is coming, more and more, to feel that current operations are not artificial.

If this belief proves wrong, business may still suffer a sharp slap.

Suppose there is no strike. Suppose, too, that steel users are accumulating excess inventory. Later they would cut orders, use their stocks. That could seriously hobble the budding recovery in business.

Beyond steel, there always looms the chance of labor trouble in coal.

Steel makers already are complaining about shrinking supplies of coking coal. And John Lewis' miners worked only two days this week.

Actually, coal stocks still are large. But after the 3-day week cuts them further, and if Lewis should succeed in pulling a strike, industry generally would be hog-tied.

Home building still can top 1948 in number of units started. Dollar volume, however, will fall substantially below last year.

The trick is this: New housing "starts" fell off rather steeply after July of last year. We ran less than 24,000 units (about 4%) behind in the first seven months this year; small gains over the final five months of 1948 would wipe out that shortfall in no time.

On dollar value, though, it's a different story. We were over half a billion dollars (about 11%) behind last year through August. Even if the number of units started catches 1948, the dollar deficit won't be erased.

Public spending continues to shore up value of total construction.

Gains over a year ago aren't so wide as they were earlier. Nevertheless, August ran 18% ahead. And value put in place on public projects for the eight months totaled \$3,339,000,000—or 30% above the same 1948 period.

This helped carry all construction for the eight months to \$12.2-billion. Last year, the eight-month figure was just under \$12-billion.

High outlays on building have corrected a number of overproduction problems for manufacturers of building supplies.

Home building, in particular, was slow getting up steam this year. But suppliers kept right on trying to catch up with demand. They caught up, all right; not only that, they overshot their market.

You saw it in stoves and hardware, roofing and siding, boilers and

BUSINESS WEEK SEPTEMBER 10, 1949 radiation—even in lumber and nails. The result was fairly widespread layoffs in some of these industries.

Shipments of plumbing fixtures, for example, in the second quarter of 1949 fell below a year ago by 23%.

But now demand for most building supplies is rising. Typical result:

American Radiator & Standard Sanitary has reopened three plants.

Better lumber prices (BW-Aug.27'49,p10) reflect high construction.

From the Douglas fir country of the Northwest come reports such as this: Buyers who sat back six weeks ago, arguing prices were too high, now are willing to take lumber at the same prices they laughed at earlier.

Food prices, which were supposed to come down this summer, haven't performed according to expectations.

An index of sensitive raw foodstuffs (compiled by the Bureau of Labor Statistics) has gone up 7% from late June. It now stands at the highest level since the first week in February.

The much more comprehensive wholesale index of food prices (also prepared by BLS) is almost exactly where it was in the first week of July.

The high level of consumer demand is the main supporting factor. Unfavorable weather, in addition, has curtailed vegetable supplies in the big city markets.

Meat provides a good example of prices that have been held up by the high level of consumer demand.

Supplies throughout July and August ran well ahead of a year ago—beef by 15% and pork by 17%. (The run of hogs to slaughter is coming earlier than usual, apparently for fear prices will flop later.)

This should have put prices down. Yet cattle have fluctuated narrowly between \$25.50 and \$26.50 a cwt. Hogs, though down a little from their recent top, still are about \$3 a cwt. above the year's low.

At the peak of the October-December hog slaughter, though, meat prices should come down. But, by then, other foods will be rising seasonally.

Brightening meat prospects is the huge corn corp. The second largest harvest on record now is beyond danger of any further weather damage.

Insufficient moisture in some areas has cut the yield. But early frost can't do much harm. The crop is two weeks ahead of last year. Soft corn will be much less of a problem than in 1948.

Government experts have been worrying about who has the dollars to buy the surplus of our record rice crop (88.2-million bu.).

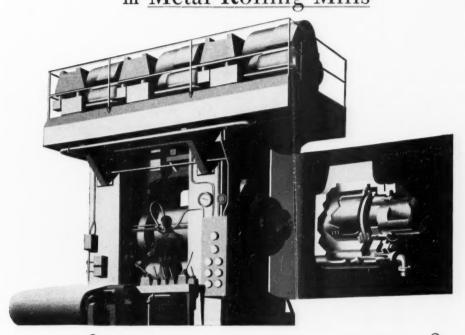
But now there is a new problem. Texas needs additional public storage space for as much as 2-million bbl. of bulk rice.

By next year, the problem of cutting production will have to be attacked. Output now is double prewar.

Marketing note: Grocers want rice and dry peas and beans packaged in transparent film or in window-front boxes. The Dept. of Agriculture finds them turning away from solid cartons and kraft packages.

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One of the many ways that industry makes multiple savings with Gulf Quality Petroleum Products

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The bearing circulating systems of many of these mills are filled with Gulf I-C Oil, noted for its stability and excellent water-separating characteristics. A typical example of its wide acceptance—Gulf I-C Oil was selected for the new reversing hot strip mill at Crucible Steel Company's Midland Works, one of the most recent installations to be put in operation in the industry.

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Gulf I-C Oil is one of more than 400 Gulf quality oils and greases that are helping industry maintain production and reduce costs. Make sure you are getting the advantages of all recent developments in petroleum science. Call in a Gulf Lubrication Engineer today. Write, wire, or phone your nearest Gulf office.

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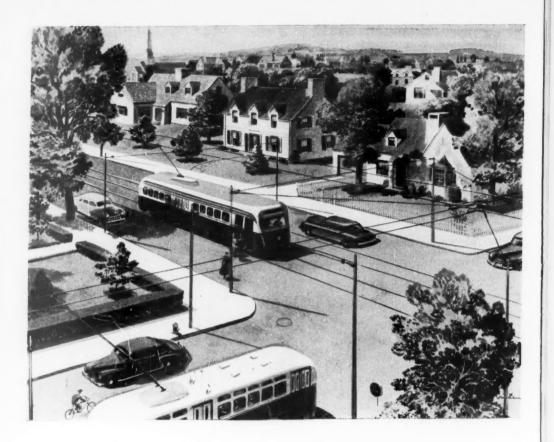
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Helps make machines produce more at lower cost



Transit Progress Paces Civic Progress

TRANSIT PROGRESS DAY (September 12) turns the spotlight on the remarkable achievements of a branch of America's great transportation system that is often overlooked—the local transit lines.

Operating day and night, in all sorts of weather, these lines are the "Seven League Boots" of millions of suburbanites. They bring jobs and shopping centers within a few minutes journey of distant homes, permit cities to grow out instead of up. The magnitude of the transit job is suggested by the performance figures. Surface, subway and elevated lines, trolley coaches and motor busses carry over 22 billion passengers annually—an average of over 150 rides a year for every individual in the nation!

In transit lines—as on the railroads—Westinghouse brakes play an important role. The subways, the elevated, and many of the trolley coaches and streamlined trolley cars, rely on Westinghouse Brakes to combine speed and dependability of service with top safety and comfort for patrons.

In transportation, the name "Westinghouse Air Brake" means more than a single product. It stands for a wide range of power braking systems—pneumatic, electropneumatic, all-electric, or their blends with dynamic each specialized to do a better braking job in some specific application. A sustained program of research and development assures that brake progress will keep continuously abreast of transportation progress.

Westinghouse Air Brake Co.

FIGURES OF THE WEEK

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210				/				20
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1946	1947	1948	1949	1	FMAA	1949	A S O P	4 D
				§ Latest Week	Preceding Week	Month Aga	Year Ago	Avera
Business W	/eek Inc	ex (above)		. *184.8	†183.9	181.0	194.8	162
RODUCTION								
Steel ingot operations (84.2	86.3	82.3	94.5	98,2
Production of automob Engineering const. awar				148,415 \$25,504	†155,367 \$29,057	142,718 \$32,797	101,879 \$20,262	\$19,4
Electric power output				5,544	5,523	5,466	5,470	3,1
Crude oil (daily average				N.A.	4,717	4,670	5,531	3,8
Bituminous coal (daily	average, 1,000 tons)			1,318	1,258	1,227	2,036	1,6
RADE						1		
Miscellaneous and L.C.	L. carloadings (daily	average, 1,000 cars	s)	. 75	73	69	83	
All other carloadings (daily average, 1,000 cars)				50	49	51	65	
Money in circulation (millions)				\$27,389 -1%	\$27,328 -7%	\$27,419	\$28,072	\$9,6
Business failures (Dun				174	176	-11% 171	-8% 94	+17
RICES (Average for	the week)							
Cost of Living (U. S. I		atistics 1935.39 =	100) July 168.5			169.6	173.7	105
Spot commodity index (Moody's, Dec. 31, 1931 = 100)				344.9	339.1	342.8	422.1	198
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)				227.6	†223.4	214.6	279.0	138
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100) Finished steel composite (Iron Age, Ib.)				301.3	296.0	295.0	346.7	146
Scrap steel composite (1				3.705e \$23.92	3.705¢ \$23,33	3.705¢ \$20.00	3.720e \$43.16	2.396 \$19.4
Copper (electrolytic, Co				17.625¢	17.625¢	17.625e	23,500e	12.022
Wheat (No. 2, hard wi				\$2.13	\$2.06	\$2.06	\$2.20	\$0.9
Sugar (raw, delivered No				5.98€	†5.91¢	5.85e	5.71¢	3.38
Cotton (middling, ten	9			30.35e	30.57¢	31.37€	31.01¢	13.94
Wool tops (New York, Rubber (ribbed smoked				\$1.706 17.67¢	\$1.681 16.91¢	\$1.618 16.30e	\$1.764 22.94¢	\$1.28
	,	,		E	201724	10.704	22.710	22.10
On stocks price index (Standard & Door's	Corn)		121.6	120.8	122.0	120.0	mo
90 stocks, price index (Medium grade corporate				3.38%	3.38%	122.0 3.42%	128.9 3.44%	78. 4.339
High grade corporate be				2.60%	2.61%	2.63%	2.84%	2.779
Call loans renewal rate,				11-11%	11-11%	11-11%	11-11%	1.009
Prime commercial paper	r, 4-to-6 months, N	Y. City (prevaili	ng rate)	13%	11%	11-11%	11%	1-19
ANKING (Millions of	dollars)							
Demand deposits adjust				46,737	46,316	46,282	47,056	++27,77
Total loans and investm				65,770	65,121	63,796	63,231	++32,30
Commercial and agricul				12,963	12,942	12,826	14,887	++6,96
Securities loans, reporting U. S. gov't and gov't gu				2,274 37,307	1,957 37,114	2,183 35,773	1,480	++15.00
Other securities held, re				4,975	4,949	4,864	34,714 4,422	††15,99 ††4,30
Excess reserves, all mem				1,270	1,000	1,190	853	5,29
Total federal reserve cre				18,225	18,081	19,213	21,937	2,26
reliminary, week ended September 3rd. Estimate (BW-Jul.12'47,p16) N.A. Not available at press time.				∦Date +R	for "Latest	Week" on	each series o	n requesi



"THEY FELT SORRY, SURE..."

"Do you know what it's like to lose your hands? The boss was plenty sorry. He came to the hospital to see me, and he was jumpy and kinda sick.

"While I was lying there, I kept asking myself, 'Will he be sorry enough to hire me back?' Me, with no hands! But I told my wife, 'Don't worry. Checks for compensation insurance will come in for the rest of our lives.'

"She said, half crying, 'I know. Still I think I'd better get my old job back.' So I saw myself waiting—waiting year after year for her to come home from work.

"The insurance people had done a good job and so had the doctor. But you can't grow new hands. So I says to the Liberty Mutual claims adjuster, 'Why don't you buy me a box of pencils and I'll sell 'em?"

"'Stop your grandstanding!' he cracks—we're pretty friendly by now—'You're doing all right.' And I guess I was. Soon I was ready for artificial hands. Then they taught me how to use them.

"Later, they ran me through a string of tests to find out what I could do with my new hands. The claimsman went to my boss. 'He can handle three types of jobs. He can do time study work, be a warehouse assistant or run the tool crib.' And I guess the boss was just as tickled as I was.

"That first day back at work earning the first day's pay in ten months! I guess everybody came around to grin at me and wish me luck. Right now I'm earning better pay than I figured I'd ever make again—thanks to my boss and Liberty Mutual!" Liberty Mutual has helped hundreds of badly injured workers become self-supporting citizens. We maintain our own Rehabilitation Center in Boston and a trained staff throughout the country. Through the medical profession they measure a man's ability. Then through his employer they match those abilities to a new—and sometimes better—job. Absence, accident and turnover records of the handicapped are better than for other workers. It is good business to re-hire them. Beyond that, it is the human thing to do.



We work to keep you safe... by protecting business, home and car owners from crippling loss... by removing the causes of home, highway and work accidents... by relieving the pain and financial burden of accidents by prompt, fair and friendly handling of all claims

*

WASHINGTON OUTLOOK



THE 1950 CAMPAIGN FOR CON-GRESS began officially last week with Truman's Labor Day speeches.

The important thing to realize is this: From here on, the Administration is working strictly in terms of votes. Truman has found no effective way to use the mandate he thinks he got last November. So he is staking everything on another mandate next year.

The strategy is to throw the whole weight of the White House into the congressional elections next year. Truman intends actively to support the liberal-labor-farm elements of his party, give the back of his hand to the Dixiecrats.

That way, Truman thinks he can increase his support in 'Congress and scare his opponents enough to put through in 1951 and 1952 at least a sampling of his long-range program:

- A welfare society guaranteed by social-security legislation, health insurance, housing.
- A guided economy, whose major moves are steered by the government—in agriculture through something like the Brannan Plan's income supports and production controls; in industry through something like the Spence Bill's regulation and stimulation of capital investment.

The tactics of the long political battle will be the same as those with which Truman beat Dewey last year.

Truman will pound a blunt, simple attack against the "selfish interests" obstructing his plans. You saw the first of that on Labor Day.

And Truman will have something special to offer to each of the three most numerous groups of voters:

- To labor, he will offer repeal of the Taft-Hartley act. The decision on this phase of the campaign was made weeks ago—when the Administration decided to let the law stay unchanged on the statute books. The unions have stigmatized the Taft-Hartley name; Truman's labor advisors were afraid that a mild revision would only confuse the voters.
- To the farmer, Truman will offer the Brannan Plan. That was the second campaign decision, and the plan is now firmly established among the key issues.
- To small business, he will offer the old antimonoply prescription—plus a new program of aids to business that is still to be formulated.

A SAWYER PLAN for business—that's what the Truman Democrats need to round out their campaign ammunition. Something to put alongside the Brannan Plan for farmers, Taft-Hartley repeal for labor.

The three together, they figure, will make a political prize package for 1950. Capturing the small-business vote is an old New Deal dream.

Sawyer may provide what Truman Democrats crave. For he intends to fashion a program for business which he can take to the White House. He sees, as business' spokesman in the Cabinet, the need for a business plan from his shop just as Brannan supplied one for the farmers.

Sawyer is on a swing around the country now, talking to businessmen, gathering ideas. He will keep at it until November. So far, he hasn't even begun to think about conclusions. He is still just listening.

Here are the suggestions Sawyer has heard most often in covering New England, the Midwest, the South:

- · Cut back excise taxes to prewar levels.
- Shorten the base period for depreciating machinery and equipment under the tax laws.
- Guarantee loans to small business the way FHA now guarantees home loans.
- Reduce the red tape of doing business with the government.

CAMPAIGN MOVE number one for 1950 is for Truman to stop griping at the present Congress. This year he often has displayed irritation at Congress' slowness or failure to carry out his ideas.

But in Truman's Labor Day speeches you saw the change of front. Instead of sulking over unresolved issues, he argued that the 81st Congress already has passed many good laws, will pass many more. It's part of the buildup for Fair Dealers in Congress.

right out on the apron of the political stage on Labor Day. Have the Republicans got an added presidential starter for 1952 in the General? Eisenhower's "middle-of-the-road" speech before the American Bar Assn. in St. Louis seems to say "yes."

Taft, meantime, keeps plugging away for reelection in Ohio. After his firm handling of Congress this year, he's the G.O.P.'s No. 1 man, though

WASHINGTON OUTLOOK (Continued)

Dewey remains as titular head of the party (BW—Sep.3'49,p21).

THE ANDERSON FARM BILL is Truman's stop-gap solution for the farm-price-support problem until Democrats can make another try to put across the Brannan Plan.

Anderson's bill doesn't have Brannan's gimmick for keeping farm income high and food prices low. But it's the nearest thing to an Administration bill that can get through now. And the Democrats want to get rid of the Republican Aiken law.

The bill insures farmers another year of prices about as high as the guarantees they have enjoyed since the war. Also, it includes two new steps that have long been agitated for:

- A better price break to encourage production of meat and milk as against grains and cotton;
- (2) Revision of the parity-price formula to boost it a notch or two across the board, by adding in the cost of hired farm labor.

THE NEXT ANTIMONOPOLY MOVE by Rep. Celler will be a bill to force big distillers to get rid of their wine and cooperage operations. The bill also will be aimed at keeping distillers and pharmaceutical producers separate.

THE "BUY AMERICAN" CRY in the Senate has thwarted the government's program to underwrite long-term expanded production of scarce minerals abroad.

Hardest hit are projects for building up the flow of manganese from South Africa, chrome from India and Turkey, tin from Malaya.

The Munitions Board and ECA have been negotiating five-year contracts for deliveries of increased output of foreign mines that has been made possible largely through ECA financing.

But now the Senate has voted to cut back \$275-million of money previously authorized for stockpiling of strategic minerals. And it took this action on the recommendations of its Appropriations Committee that:

- (1) In making stockpile purchases, the Munitions Board ought to exhaust every possibility for getting the stuff at home before looking abroad; and . . .
- (2) Whenever foreign purchases are negotiated, the contracts ought to be short-term and cancelable at will.

The committee's advice isn't law. But to any government negotiator, it amounts to the same thing.

THE WORLD BANK plans to go to the U. S. public for another \$100-million sometime next winter.

This will be the bank's second offering of its bonds in this country to finance worldwide development operations. Previous issues, sold in July, 1947. totaled \$250-million.

The new issue will be offered to investment syndicates on a competitive-bid basis. It probably will be a 25-year maturity at 23/4 % interest. Date will hinge upon the strength of the bond market and on when the bank decides it needs the money.

To date, the bank has loaned out \$717-million to nations of the world, drawing mainly on the subscriptions that member nations put up at the time it was started. It still has \$326-million on hand. Pending applications under serious study would take about \$100-million.

PUBLIC CONSTRUCTION turns out to be no help in Truman adviser Steelman's effort to help areas with high unemployment.

It looked like a natural for a time. A quick check had shown that public construction in several depression spots was down as much as 87% from last year. All that was needed, it seemed, was to shovel in some contracts.

Then the reasons why that wouldn't work began rolling in:

- Direct relief payments already are draining local treasuries so badly that town councils can't divert money to streets and sewers.
- Debt limits hamper cities and states in efforts to raise capital; they find it hard to scrape up the money to match federal grants for highways and airports.
- There are limits to federal funds today, too; even more importantly, there are limits to Steelman's freedom to channel available funds where the need is greatest.
- Even booming construction takes only about 4% of an area's labor force; besides, factory workers, especially the women, aren't fitted for construction jobs. In Fall River, Mass., for instance, construction is up 1,500% over last year. But Fall River is still listed as a depression area.
- Finally, many of the distressed areas are in trouble because their industry is slowly moving away—New England textiles, for example.



Modern mine machinery is a 20th century marvel, and it's just good business to put its care in the hands of first-class mechanics and machinists. And good machine shops cost money, a lot of it. For instance, the one shown above, with its equipment, cost all of \$150,000. It serves but a single mining operation.

Expenditures like this are necessary in modern coal mining, because today miners rarely touch pick and shovel. Instead, their hands operate the controls of machines. The "heavy work" is done by mechanized horsepower. A cutting machine, an automatic loader, and a shuttle car, whose combined cost adds up to a \$60,000 coal mining team, must be kept in top shape to justify the heavy investment.

So mechanized mining, with its need for keeping machines in good running order, has created a new kind of "miner" the machinist, the electrician, the welder, who keep mine horsepower on the go. Modern mining practices are a far cry from those of "pick and shovel" days. Today mines are "blueprinted" in advance. Backed by facts learned from geological surveys, engineers can plan mine layout, without running into costly alterations due to unexpected faults in rock and seam formations.

Such planning permits speedy handling of coal from seam to surface for washing, sizing and grading in preparation plants. The result is mass production of many grades of coal, each especially adapted to efficient use in one or another of the many different types of furnaces in America's homes and industries.

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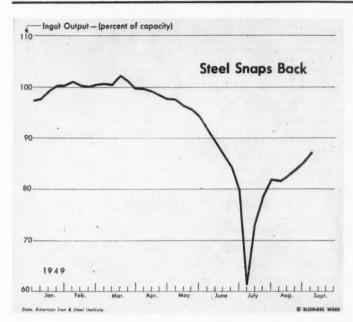


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BUSINESS WEEK

NUMBER 1045 SEPTEMBER 10, 1949



Steel Demand-Real or Phony?

Even shortages are showing up in some lines. Much of the business on the books looks solid, but the industry fears some of it is scare buying brought about by the strike threat.

Steelmakers are staging a comeback as dramatic as anything that ever happened on Broadway. But it may turn out to be only a short run of prosperity.

Since the July low point (BW-Jul. 2'49,p19), production has increased more than 25%. Even the Labor Day holiday couldn't pull the operations rate down very much. The American Iron & Steel Institute estimated operations this week at 84.2% of ingot capacity—only 2 1/10ths point below last week's 86.3% rate.

• Temporary?—Only one thing seriously worries the steel men. They don't know how much of the rebound is due to the threat of a steel strike later this month. Even so, they're sure that much of the strength comes from buying by customers who need the steel to carry on current operations and to restore depleted inventories.

Whatever the cause, August bookings of steel orders were heavy; some

companies say new orders last month were the best since late winter. As a result, most mills are now booked heavily into November. Indeed, order books for flat rolled products even have December delivery notations.

• Auto Demand—The continued boom in the automotive industry is a principal reason for the improved steel outlook. More and more, Detroiters are beginning to believe that demand for new cars will hold up until the year end, even though a more normal seasonal pattern would be an autumn decline in car production. If fourth-quarter production schedules are maintained fairly close to present rates, a lot of steel will be processed.

Steel is going into construction, too, at a surprising rate. Both residential and non-residential building, so far in 1949, are beyond earlier expectations. Unless winter comes early, construction demand for steel is not expected to

slump until November or December.

There's more behind steel's good position today than astos and construction, though they are the two biggest steel buyers. Other major users are also heavily in the market for steel. Some of that buying, of course, is insurance against a possible strike. But fabricators generally seem to be buying again to meet current production after months of working down inventories.

• Shortages—Right now, for example, galvanized steel is squeezed. One reason: unexpected demand for grain storage bins. The Commodity Credit

son: unexpected demand for grain storage bins. The Commodity Credit Corporation has been backing farm buying of grain bins to hold this year's bumper crops. This demand from the farm was enough to produce a near-shortage because galvanized products were already strong due to heavy construction volume.

Structural shapes are tight—also because of the construction boom. Bars can be had on fairly normal delivery. Business in steel sheets is most brisk.

. Hungry customers are going to warehouses today for more steel. With steel mills booked through October and into November, the middlemen offer the only opportunity for early delivery. Even there, few customers are having much luck getting sheets of any variety. However, it's likely that this pressure on warehouses will lift quickly should the current steel wage dispute be settled quickly and peacefully.

• Strike Threat—If steelworkers strike Sept. 14, the demand for steel will swell some more. Within four to six weeks many steel consumers would be scraping the bottom of the barrel, according to government sources. Industry people, however, doubt that the supply problem would get critical that fast.

The auto industry dertainly would not be hurt very soon. The vehicle makers have been building inventories all summer. The parts companies started to do the same thing a little later, but their inventories are not too large. A few automotive companies have leased extra wareliouse space to stack up steel

What if there is no steel strike? That would mean, first of all, uninterrupted steel production. And at the same time, it might mean reduced orders as scare buying ended. Second, if the steel workers get more money, it would mean higher steel-making costs—and probably higher priced steel for the customers.

Appliance Picture Brighter

Lower prices and easier credit have brought consumers back into the market. Long, hot summer helped refrigerator sales. Washers, sweepers, radios, TV sets moving better, too.

Early this year it looked as if the boom in electrical appliances had turned into a bust. Manufacturers trimmed production and prices, and prayed for

• Relief—This week their prayers seem to be answered. In most lines, dealers noted a sharp sales upturn. One item especially—refrigerators—was going like hot cakes. In some parts of the country, demand was so strong that dealers ran out of stock. The market for washers firmed up, too.

The effects of this new buying wave rippled through the economy fast: The Crosley Division of the Avco Mfg. Co. for instance, put on a second shift of 1,000 at its Richmond, Ind., plant to make more Shelvadors (BW–Sep.3'49, p28). Thor Washing Machine rehired most of the people that were laid off

earlier this year.

Meantime, there was a much stronger tone to the market for electric ranges, television sets, radios, and other household equipment.

 Reasons—Manufacturers, distributors, and retailers have several reasons for the sales pickup. Most agree on this as No. 1:

Consumers began to hold off buying last spring, sniffing lower prices in the wind on big-ticket appliances. They guessed right. Prices did take a header one way or another: Some manufacturers made outright cuts; others brought out new, lower-priced lines.

Now, say the manufacturers, consumers have made up their minds that they have just about seen the end of price cuts. Hence, they are unzipping their wallets to buy the products they put off buying before.

 On the Cuff—Appliance men feel, too, that easier credit terms have been a big help. In many cities, for example, you can get a refrigerator without so much as a down payment. In other areas, \$5 or \$10 down will put a washing machine or a deep freeze unit in your house.

Coin-meter selling has worked well, too. That's the system whereby the consumer pays for a refrigerator or television set (and, incidentally, keeps it running) by dropping a two-bit piece every day into a device attached to the appliance.

Barrett Hardware Co., in Indianapolis, tried the coin-meter plan last month. Normally Barrett sells about three or four refrigerators a week. In the first two weeks the coin-meter system

was in effect (coupled with a no-down payment offer) 600 units were grabbed up. One interesting angle: More than half of Barrett's customers made a downpayment anyway and decided not to use the meters.

Barrett figures the meters were a powerful lure, however, even for customers who decided not to use them. Said one Barrett executive, "Never say something costs \$7.50 a month—25¢ a day sounds cheaper and easier to pay."

 Salesmanship, Prices—A few appliance manufacturers suggest other reasons for the upturn: better selling at the dealer level (with heavy assistance from the manufacturers to keep retail sales promotions going), and the threat of higher prices.

If materials and wage costs rise, appliance prices might point upward again. That has led some consumers, the manufacturers say, to buy expensive appliances now instead of holding off for a while

Not to be overlooked, either, is the high level of residential construction. A lot of new houses mean a lot of new refrigerators, washers, sweepers.

• Weather-This year's prolonged hot weather comes in for some sales credit

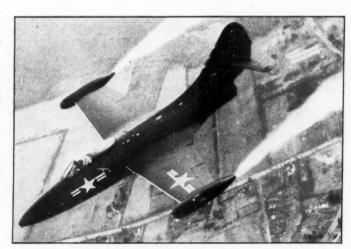
in the refrigerator line. The heat taxed old, prewar boxes; that brought more buyers into the market. A survey by Hotpoint, Inc., shows that 98% of its sales were for replacements. Undoubtedly, many an old unit finally melted in the heat wave, had to be junked.

The upsurge of demand for refrigerators caught plenty of retailers and manufacturers with their stocks down. Dealers, anxious to work off their inventories, had bought sparingly. And manufacturers didn't want to maintain full production without more orders on their books.

G.E.'s position was typical of the big manufacturers. As of Aug. 24, the company had orders for 150,000 refrigerators. Even with overtime work, G.E. isn't likely to catch up with the shortage until late October.

At the local level, dealers pressured distributors for units which they didn't have and couldn't get. Said one big New York City wholesaler: "We have absolutely no inventory Dealers have been calling me every day, using every trick in the book to get merchandise And even if I get my full September allocation. I'll still be 3,100 units short of filling the orders now on hand"

• How Long?—Traditionally, the big refrigerator selling season starts in April and May, tapers off in the fall. So the refrigerator trade is wondering if the current rush of consumer buying is temporary, or whether it will continue through the autumn season. It's still too early to tell.



Drop the Gas, Not the Tank

Formerly fighter pilots dropped their wing tanks to get extra speed and maneuverability in combat. With the new tanks shown above on the Navy's F9F-3 Grum-

man "Panther," the pilot jettisons only the gasoline—in 40 seconds. The tanks fit snugly against the wing tips to give less drag than conventional dropable types.





N. Y. POST: "But thar's gold in them heels" PRAVDA: "Dancing to tune of Wall St."

To New York and Moscow it's the same from a different angle, but . . .

How Far Will U. S. Back Tito?

U. S. is convinced the stakes are high enough to make it worth supporting Yugoslavia in break with Moscow. It's a new Cold War issue. But aid will be largely economic, not political.

The Stalin-Tito fight has mushroomed into a major East-West diplomatic issue. A year ago it was a local Cominform squabble, but now the stakes—both for Moscow and for the West—are high enough to produce a full-fledged crisis in U.S.-Russian relations.

U.S. Stake: So long as Tito can be kept alive, with his economy functioning, he's a reminder to other Iron Cutain nations that they might still be able to split with Moscow and get away with it.

Russian Stake: A Tito defeat would be a stern warning to other satellites to stay snugly in the Kremlin fold—and a warning to Western powers to stay out. A Moscow victory over the West on the Tito issue would even the diplomatic scoreboard after the Soviet strategic withdrawal from the Berlin situation last

• Tito Gets Help-How far will the U.S. go in stiffening Tito's ability to resist? By this week it was possible to make a pretty good estimate: limited economic backing, yes; political or military support, doubtful.

A measure of what Washington means by "limited" economic backing can be seen in the recent Export-Import Bank loan of \$20-million to Yugoslavia. On top of that Tito may now get a World Bank loan to buy industrial plant in the U.S. Washington has loosened up on export licenses, too. Continental Foundry & Machine Co. of Pitts-

burgh has a license to supply Yugoslavia with a \$3-million blooming mill.

Next item on the docket is the matter of granting export licenses to allow Tito to get U.S. machine tools so that he can produce more munitions and heavy equipment.

• Tito's Error-Tito may need his munitions before many weeks pass. He has struck a serious blow at the Communist position in the world. Freedom and equality of all Communist peoples may be written into the Marxist cannons, but Stalin is an internationalist in theory only. He is an aggressive believer in the absolute predominance of Russia over the rest of the Communist world. What Tito has done is expose the hollowness of Soviet pretension. By rejecting total Russian control, he has called an ideological bluff. So Tito, who makes this contradiction in Soviet strategy a daily spectacle, must go.

Just how Stalin intends to remove his Yugoslav enemy is another question. The chances are that it will be any way short of open war. Stalin cannot order his armored divisions, now maneuvering in South Hungary and on the Rumanian-Yugoslav frontier, to march into Yugoslavia. This would be a clear case of military aggression, which no interpretation of the U. N. Charter could circumvent.

• Border Incident—However, there are more ways of invading a country than by dispatch of national armies. The MVD has its own shock troops. The existence of "international brigades" in Hungary, Bulgaria, and Rumania is a known fact. These unofficial armies, intermingled with Yugoslay Stalinists, might create a border incident. This could serve as a pretext for the rupture of diplomatic relations between one of the Cominform Balkan states and Yugoslavia. Or the Russians may hope that local discontent in such traditionally unruly areas as Macedonia and Montenegro can be fanned into rebellion.

In either case, the stage might be set for an anti-Tito coup d'etat, which seems to be Stalin's aim. Marshal Voroshilov has arrived in Bucharest. He may well have come to preside over the next phase in Russia's struggle against

Tito.

Despite his denial, there is little doubt that Tito would apply to the U. N. Security Council on the first of any such Soviet monkeyshines. But the results could hardly be more effective than U. N. action on the Greek Civil War. Yugoslav delegates would just be reading the former Greek parts in the script.

Failing U. N. action, Tito is committed to a fight to the finish. Tito has at his disposal a personal guard of 100,000 men, and an army of 500,000. So he might decide that the best defense is the offensive. For example, provocations by Stalinist international brigades might lead Tito to attack Albania and Bulgaria. Then Rumania and Hungary might also enter the Balkan war.

• On the Agenda—This potentially explosive situation is sure to play an important role in the current political talks Britain's Foreign Secretary Bevin and Secretary of State Acheson are holding in Washington. Bevin may urge joint U.S.British action to check disguised Russian moves and forestall the danger that Tito may turn the conflict into an international crisis to save his skin. Bevin's suggestions might include:

(1) A joint note of warning to the Soviet Union that the Western Powers will not tolerate an obvious menace to

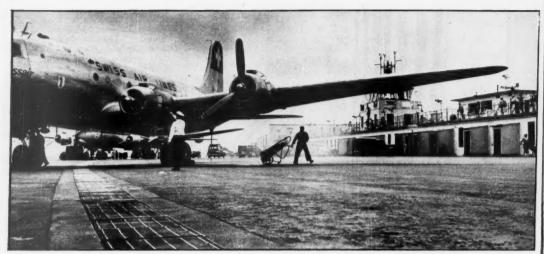
world peace.

(2) Internationalizing Albania, should military conflict arise, by a U. S. British occupation. This might check further expansion of the crisis.

(3) Joint British-U.S. supervision of planned credits and of any shipment of

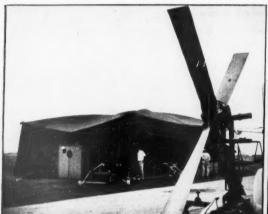
arms to Yugoslavia.

• Not So Drastic—But U.S. policy in the Tito affair is not apt to take such drastic form. The U.S. is not so deeply involved with Yugoslavia as is Britain. Secretary Acheson does not expect Russia to go to war. Nor is he too whrried that Tito will get panicky and blok the works. The State Dept. thinks Tito is fairly secure in his chair so long as he can keep out of the way of an assassin's bullet.



OPENING ON THE WORLD, Idlewild is the international part of terminal (background) still houses customs, but field already handles

New York's four-field airport system. Year after its opening, temporary 20,000 passengers a month—a million a month eventually.



are already built, three more will be up by spring.



TENTS still house Pan American's maintenance shops, but two hangars LONESOME among Idlewild's makeshifts, permanent new Federal Building houses weather center, CAA offices, cost \$5-million.

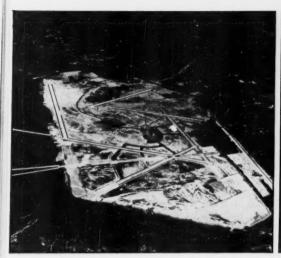
Idlewild Airport Gets Ready for 10-Million

It's easy to miss the point when you first land at New York International Airport. Obviously, the field covers a lot of territory-7 sq. mi. of it. But you will see little else to prove that what you're looking at will soon be the world's greatest airport by far, with a terminal building eight times the size of New York's Grand Central railway station, a large hotel, other facilities.

After a lot of delays, Idlewild (as it is still better known) has finally reached the homestretch. Last week, for the first time, Northwest Airlines landed a

Boeing Stratocruiser at the new field. And this week, Trans World Airline said it was ready to work out a lease with the Port of New York Authority, the air-port's new operator. When TWA signs, Idlewild's tenants will include 10 major domestic and foreign scheduled carriers, plus a handful of non-sked lines. It is now handling some 60 flights a day, carries 735,000 lb. of cargo a month, gives steady work to 3,000 regular employees. • Long Way-Trouble is, you can't see at first glance how far Idlewild has come since it was a swamp at the city's outskirts. Much of the original work-filling, draining, building underground conduits, laying the runways-is hardly visible. But that work cost New York City some \$68-million. Then the Port Authority took over on a 50-year lease (BW-Nov.13'48,p72); it has spent \$13-million more. By the year's end the authority will have spent another \$29-million. When the job is finally done, the total bill will come to at least \$200-million.

The Port Authority is meshing Idlewild into its system of metropolitan airports, which includes New Jersey's New-



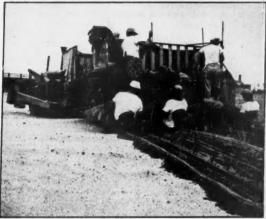
PIERS stretching into Jamaica Bay (white lines, left) at end of runways carry lights to guide night landings. Only four are now in use.



HUGENESS of Idlewild shows in this photo-comparison. It takes all of Manhattan below 42nd St. to equal Idlewild's 4,900 acres.



NEW SLOPE-LINE lights will be aligned so that they look saw-toothed to pilot if he is off glide path, continuous if he's O.K.



FLYING SAND now a nuisance to incoming planes, will soon be anchored by beach grass. Crew uses converted tobacco planter.

People a Year

ark and Teterboro airports and New York's LaGuardia. Idlewild will handle some short-run domestic traffic. But with its seven long runways—one of them 10,000 ft. long—its mainstay will be heavy foreign and domestic stuff. As it stands now, 98% of its traffic is in four-engine jobs. And it's the only metropolitan field that can take Stratocruisers carrying a payload.

• Troubles—Work actually started on Idlewild about eight years ago, but a string of difficulties kept slowing the project. It was not until July of last year that

the first plane—an Air France Constellation—finally was able to take off on a scheduled flight.

First, of course, there was the war. Then came a union jurisdictional dispute between the A.F.L. electrical workers and the independent United Telephone Organization. That brought things to a standstill for months (BW–Jun.18'49, p111). Finally there was a long hiatus while the Port Authority and the major domestic and foreign airlines wrangled over the terms of the leases.

Wrangle—The Port Authority, on taking over, said it couldn't profitably operate under the original leases signed by the city. So it canceled them. It wasn't until early this month that the airlines and

the Port Authority ironed things out. The pact was signed by Pan Am, Northwest, American Airlines, American Overseas Airlines, and British Overseas Airways Corp.

The overseas carriers immediately moved part of their operations from La-Guardia, and joined the scattering of smaller domestic and foreign lines that had previously settled. TWA signed up next. Other domestic lines will probably do so when they begin to operate Stratocruisers.

The airlines will move more of their operations from LaGuardia to Idlewild as fast as hangars and other facilities are built. That's the big job that now faces the Port Authority.

Will Kaiser Reorganize?

Wall Street wonders whether he's trying to combine his enterprises into one public corporation. Auto firm is losing money this year but other units prosper.

"A man who gets things done." That's how the American public got to know—and to admire—Henry J. Kaiser

during the war.

"Getting things done" during the war-when Uncle Sam was the customer and cost was no object-was one thing. But the war is over now, and so is the roaring postwar boom. And Henry J. Kaiser is finding out that "getting things done" in a highly competitive automobile sellers' market is something else. · Ups and Downs-Kaiser-Frazer Corp. is the shining example. A couple of years ago the company sold its shares to the public through two offerings-at \$10 and \$20.25 a share. Today, K.-F. stock is selling on the New York Curb Exchange at about \$3.50 a share. In 1947, the company earned a net profit of \$19million. Last year it made \$10.4-million. In the first six months of 1949, it lost \$8.1-million.

The financial state of K.-F. has produced plenty of rumors, lately. most comprehensive one-and one that has a lot of adherents-runs like this: Henry Kaiser has decided that the only way to bail out K.-F. is to put through a gigantic recapitalization. It would combine substantially all of his widespread interests, including-as just one cog-Kaiser-Frazer Corp. Then it would offer shares in the whole thing to the public. Having made this decision, the rumor runs, Kaiser got First Boston Corp. working on it. And just last week First Boston is supposed to have told Kaiser, finally and definitely, that such a Kaiser combine would not be possible if Kaiser-Frazer were included.

Henry Kaiser himself could not be reached this week for comment on the rumors. E. E. (Gene) Trefethen, Jr., Kaiser's deputy in almost all of his enterprises, declined to confirm or deny them. "There's no news about that,"

he said. "No comment."

• Kaiser-Frazer—Many people in auto circles feel that K.-F. is still not in too bad shape. They lay much of the first half's \$\$\frac{1}{2}\text{-million}\$ loss to the price cut in the company's cars this spring; it is known that K.-F. paid its dealers more than \$\$4\$-million to cover their paper loss on cars they had in stock.

These observers give Kaiser-Frazer credit for doing a whale of a production job right after the war—one that most Detroit wiscacres said was impossible. In a matter of months K.-F. set up a production line, wangled materials and parts, and started rolling out Frazer and

Kaiser sedans. Mechanically, the cars were conventional. But they were early style leaders (BW-Jan.24'48,p19). And K.-F. built and sold plenty while the market was still good.

The market isn't that good now. And K.-F. has two major problems ahead of

it, according to Detroit.

(1) Its dealer organization. In the final analysis, any auto maker sells solely through its retail outlets. And, because they are new, inexperienced, relatively amateur, many of Kaiser's do not stack up with the competition.

(2) New models. The feeling is that, to compete effectively in the coming buyers' market, K.-F. will have to come out with a new line in 1950.

Tooling for a new model is an expensive business. So it's a pretty good bet that K.-F. is going to need new working capital soon. The rumored reorganization would have supplied it, had it gone through

it gone through.

Newest rumor, this week, is that
Kaiser will ask RFC for \$60-million. If
that's so, the big question is what he
would be prepared to offer as security

for such a loan.

• Steel Deals—Some of the problems K.F. has encountered so far have been of Henry Kaiser's own making. And they illustrate pretty well the difference between "getting things done" in wartime and in peacetime.

Take steel. The big bottleneck in early postwar auto production was lack of sheet steel. So Henry Kaiser set out to do something about it, in typical

Kaiser style.

In 1946, K.-F. helped Cyrus Eaton set up Portsmouth Steel Co. by buying a big chunk of stock in the new company. In return, K.-F. was guaranteed a portion of the company's output.

In 1947, K.-F. bought the Chapman-Price Co. sheet mill in Indianapolis. Last year, it sold its Portsmouth holdings, but retained options to buy about 16,000 tons of steel monthly.

• And Iron—To get pig iron for its various steel properties, K.-F. leased from WAA a Cleveland blast furnace that had been operated by Republic Steel (BW—Oct.23'48,p28). Then the company found that, because the furnace was entirely hemmed in by other Republic plants, Republic was the only company that could run it economically. So it leased it back to Republic in exchange for a guarantee of 12,000 tons of pig iron a month—at regular market prices.

Next, K.-F. bought Phoenix-Apollo Steel Co. (BW-Nov.27'48,p20). Finally, this year, because its options with Portsmouth were running out, K.-F. looked around for still another source. Its answer: to build a new 200-ton open-hearth furnace, costing more than \$2-million, in Republic's Cleveland plant. The furnace will go into production in six to eight weeks. It will be Republic's property, although K.-F. paid for it. All K.-F. gets is the right to buy its entire output, in the form of sheets—at regular market prices.

Today—now that Kaiser finally has his steel supplies all lined up—the steel shortage is no longer acute (page 19). And Kaiser-Frazer is stuck with a lot of relatively high-cost steel, and with big investments in steel facilities that

have to be amortized.

• Why Lump Them?—Whatever the current status of Kaiser-Frazer, observers are agreed that the rest of Henry Kaiser's empire is in pretty good shape. Kaiser himself is said to be worth at least \$25-million. Why, then, would he want to lump his rich and successful properties with the stumbling Kaiser-Frazer?

One explanation: K.-F. has outstanding a \$16-million loan, due Jan. 31, 1951, from Bank of America and Mellon National Bank & Trust Co. The loan is guaranteed, jointly and severally, by all three of the top holding companies in Kaiser's empire. So, since Kaiser's other interests are so deeply involved anyhow, why not merge? Such a recapitalization might also permit Kaiser to cash in, as capital gains, on profits in his other enterprises.

Widespread Interests—Kaiser has his

• Widespread Interests—Kaiser has his fingers in literally dozens of pies. Some—but not all—are shown in the chart on page 25. The three top companies since the war have been Henry J. Kaiser Co., Kaiser Engineers, Inc., and The Kaiser Co. (although the last two have been merged within recent

months)

Henry J. Kaiser Co. was the original foundation stone of the entire empire. It was set up in 1913 in Vancouver, British Columbia, as Henry J. Kaiser Co., Ltd., to make and sell sand, gravel, and aggregates, and to do contracting work. The company soon moved across the border into Washington state; then to California. With a group of other contracting and construction companies (they were known for years as "The Six Companies") it built such huge installations as Hoover (Boulder) Dam, Bonneville Dam, and much of Grand Coulee Dam, and sank the piers for the San Francisco-Oakland Bay Bridge.

• The Other Two-The Kaiser Co. was set up in 1933 as a sort of profit-sharing agency for Kaiser's top officers and exccutives. The idea was that it would share 50-50 in all of the Kaiser jobs, and that it would be free to bid on its own on jobs Kaiser himself wasn't interested in—which, by the way, it has seldom done.

Kaiser Engineers, Inc., was formed near the end of the war to sell the Kaiser companies' engineering knowledge to anyone who could pay for it (BW-Apr. 7'49,p66). It still fills that function. But it also holds an interest today in several of the Kaiser companies and now has entirely absorbed The Kaiser Co.

• Into Cement-Kaiser's first big move out of the contracting-construction game came in 1939. And then it was into a closely related field. In those days, the cement business on the West Coast was dominated by five companies. The government was peeved at them because of their habit of submitting identical bids on most government contracts.

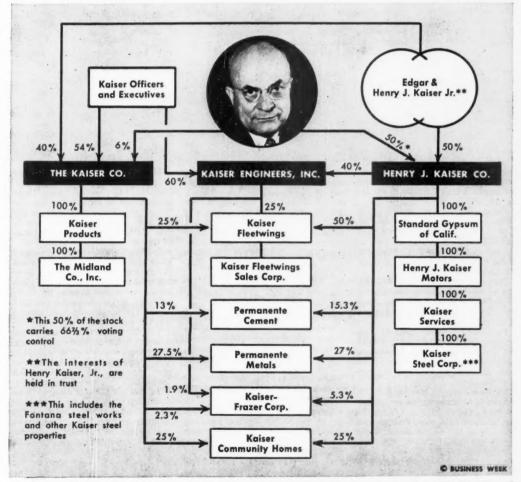
About then, Shasta Dam was being built. It was going to need some 6-million bbl. of cement. So Kaiser took an option on a big limestone deposit and submitted a bid-22¢ a bbl. lower than the regular producers' bid. He didn't have a cement plant, which made the bid look a little odd, but he got the contract. He built his plant in six months, and fulfilled the contract. That plant today is the heart of the Permanente Cement Co.

 Wartime Growth-Had it not been for the war, that might have been the extent of Kaiser's diversification. Or it might not. In any event, the war did come along.

By the time it ended, Kaiser was in, among other fields: steel (Fontana); shipbuilding (Richmond Shipbuilding Co., Oregon Shipbuilding Co.); magnesium (Permanente Metals); and aviation (Kaiser Cargo, Inc.).

 Postwar Growth—Since the war, he has spread out even further. He's in autos, of course, with Kaiser-Frazer. He's in aluminum in a big way with Permanente Metals Corp., which has dropped out of the magnesium field. This company also produces dolomite, seawater chemicals, and refractories.

He's in shipping in a small way, through Permanente Steamship Corp., a subsidiary of Permanente Cement. He's in residential building, with a half



CORPORATE MAZE above includes some of the companies run by Henry Kaiser. There are others in subsidiary positions. Part of this chart is fact; part is guesswork. And part is already history. For instance, the best current information is that The Kaiser Co. and Kaiser Engineers are now one. But how the merger was accomplished, or how it affects the organization chart, is not known.

interest in Kaiser Community Homes, which builds housing developments on the Coast. He's in insurance, along with his old construction cronies, with Industrial Indemnity Co. and Under-

writers Service, Inc.

His Standard Gypsum Co. of Cal. makes gypsum wallboard. His Kaiser Metal Products Co. (just changed from Kaiser Fleetwings Co.) makes stampings for K-F. cars, and tubs and other sanitary ware for Sears, Roebuck. Sears now owns a piece of it. (Earlier in the postwar period, Fleetwings tried and failed with, first, a small plane, then an automatic dishwasher.)

His latest venture is a deal for the manufacture of large-diameter (up to 36-in.) steel pipe. Basalt Rock Co., of Napa, Cal., will make the pipe from steel supplied by Kaiser Steel Corp. from Fontana. It will be marketed

as Basalt-Kaiser steel pipe.

And, of course, Kaiser is still in contracting and construction. For instance, his companies own part of Consolidated Builders, Inc., which built a big part of Grand Coulee Dam. Among that company's current projects: a \$28-million dam job on the Detroit River, near Salem, Ore.; a piece of a big tunnel job in New York.

• Financial Details—Most of the Kaiser companies are closely held within his personal and official family. So financial details are hard to come by. But, in addition to Kaiser-Fraser, the public holds stock in two other Kaiser companies: Permanente Cement Co. and Permanente Metals Corp. Both are do

ing very well.

Permanente Cement earned \$2.3-million in the fiscal year ended Jan. 31, 1948; \$3.4-million in the 1949 fiscal year. Gross rose from \$16.3-million to \$19-million. For the first six months of the current fiscal year, net is about 2% higher than a year ago.

Permanente Metals earned \$9.2-million in the fiscal year ended May 31, 1948; \$12.0-million in the 1949 fiscal year. Gross rose from \$61.6-million to

\$73.7-million.

Permanente Cement raised its regular quarterly dividend from 25¢ a share last year to 35¢ this year. Permanente Metals pays 30¢ quarterly. Both paid extra dividends at the end of their 1949 fiscal years.

The Boss—Henry Kaiser has many associates in his many companies, including his two sons, Edgar and Henry, Jr. But no one who has any dealings with any part of the empire doubts for a minute that Henry still runs the show, pulls all the strings.

Gene Trefethen comes nearest of anyone to being his alter ego. Trefethen, now 40, is president of Kaiser Metal Products; executive vice-president of Kaiser Steel, Permanente Metals, and Permanente Cement; vicepresident of Kaiser-Fraser and of Henry J. Kaiser Co.; and officer of most of the other Kaiser companies. He is probably the most important of the executives who surround Henry Kaiser.

• Inner Circle—Next in line, probably, is son Edgar, who runs Willow Run as president of Kaiser-Fraser. He is also vice-president of, among others, Per-

manente Metals, Kaiser Steel, Kaiser

Metal Products, Kaiser Community Homes, and Henry J. Kaiser Co.

Other members of Kaiser's inner circle include: Chad F. Calhoun, vice-president of Permanente Metals, Permanente Cement, and others; G. G. Sherwood, secretary and treasurer of the steel, aluminum, and cement companies; Clay Bedford, executive vice-president and general manager of K.-F.

Retailers Step Up Orders

Expecting fine fall and winter business, merchants are buying in larger volume. Inventories slightly low in relation to sales, but nobody is trying to load up on goods, either.

When general business turned down last winter, retailers were among the first to run for cover. The big stores got out the ax, slashed stocks down to a bare minimum. Buying often went on a hand-to-mouth basis.

• Change of Heart—Now, retailers suddenly have started scrambling out of their storm cellars. They have decided that business this fall is going to be pretty good. And they are stocking up.

As a result, the past couple of weeks have brought a sudden flurry in department-store buying. In some lines, stores haven't been able to get all the goods they want. For instance, there is a real—if temporary—shortage of nylon ready-to-wear (page 28). A similar squeeze in rayons seems to be in the making. In these lines, you could almost close your eyes and imagine that the old sellers' market was back.

• Picture—Here's the picture a business week survey of big department stores and specialty stores in major cities across the country showed this week:

sales this fall will run only a little behind 1948—if things work out as the stores expect. Many merchants hope to equal or beat their last year's records, especially in the early fall.

INVENTORIES ARE SLIGHTLY LOW in relation to sales expectations. But most stores have comfortable stocks.

sharply. This reflects the general faith in fall business. Stores are ordering now on the assumption that goods will be moving briskly in October and early November.

Viewpoint—The merchandise manager of one of the big San Francisco stores sums up the typical viewpoint this way: "The only way you can make money is to have the merchandise for the customer to buy. It's better to get rid of inventory in markdown sales than to tell a customer that you don't have what she wants."

And the president of a Cincinnati store says, "It's more like it was before the war. We aren't grabbing everything in sight; and we aren't trying to empty the warehouse. We're carrying a moderate inventory and ordering 30 to 60 days ahead like we used to."

 No Rush—In spite of the increase in optimism, stores aren't trying to load up heavily on anything. Even when they can't get delivery as quickly as they had expected, they stay cautious.

One of the biggest Chicago stores still has covered only part of its expected requirements for the fall season. This is a return to its prewar practice. The management hopes to get better turnover by keeping stocks down and ordering frequently.

Most stores now have stock on hand or on order to carry them through mid-October. In textiles, some have stretched out as far ahead as January. Where there is no question about getting prompt delivery, buyers usually have instructions not to get more than 60 days into the future.

• Too Cautious?—Some store managers admit that they probably lost business this summer because they weren't carrying big enough inventories—thus agreeing with what manufacturers frequently have said. But retailers retort that most of the lost sales would have been in seasonal sports items.

The, hot weather, they say, started early and lasted practically all summer. Stores were cleaned out of such items as bathing suits early. If they had had more, they could have sold more. But there wasn't time enough to reorder.

• Big Fall?—If fall sales come up to expectations, 1949 will be an excellent year for retailers in comparison with anything except 1948. Department-store sales in the first eight months this year have run only 5% under 1948 dollarwise. In the week ended Aug. 27, they were a scant 1% under. But the weather probably made that comparison look better than the basic trend justified (BW—Sep.3'49.p9)—last year the weather was very hot at the end of August; this year it was fine.



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BUSINESS BRIEFS

The Superior mill at Canton, Ohio, supplied Borg-Warner with 100,000 tons of sheet steel needed for appliances. Now that the shortage is over, B.-W. has sold the mill, which it bought from Continental Steel Co. in 1946 (BW—Dec.21 '46,p16), to an Ohio scrap dealer.

A change of name for Goodall Co., the Goodall-Sanford subsidiary that makes Palm Beach cloth, heralds the introduction of a new cloth for summer wear. The new name: the Palm Beach Co. The new product: Fiber-Lok, a mixture of rayon, nylon, and mohair.

NBC is the second network to bring suit in a federal court to enjoin FCC from putting into effect its ban on give-away shows (BW-Aug.27'49,p31). ABC was the first.

The nylon shortage isn't due to case up any, says du Pont. It points to the continued heavy demand and development of new uses—such as men's shirts.

The merger planned by Ogden Corp.—a subsidiary of Floyd Odlum's Atlas Corp.—and Barnsdall Oil Co. hinges on a favorable tax ruling by the Bureau of Internal Revenue. The Odlum group holds a controlling interest in Barnsdall.

Cleveland may give up the national air races because of the William P. Odom crash in the Thompson Trophy race. The resulting death of two suburbanites has aroused public feeling. Dallas, Los Angeles, and Detroit are bidding for the event.

For greater efficiency, Stromberg-Carlson Co. has split its production setup. Separate divisions will now handle (1) radio and television sets, which require quick engineering and manufacture, and (2) telephone equipment, which is tailored to order.

Monthly car production, which has been inching up on the 1929 records for some time, finally broke through last month. With 677,979 cars and trucks (both U.S. and Canada), August was the best month in history.

U. S. Steel is moving deeper into the prefab housing field. Its subsidiary, Gunnison Homes, Inc., will now make small four-room houses—out of plywood.

Theater television is ready to go, says Twentieth Century-Fox. It has asked FCC to set aside a 360-megacycle band for theater operations. That would allow six theater TV circuits in each locality.

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It cast Standard Gypsum Company of California about \$700 per hour every time heavy overloads caused the 25 h.p. motor driving screw conveyors in the mixing house to fail. And such expensive motor failures were occurring every 30 to 60 days until the silicone insulated 10 h.p. motor shown above was installed in December, 1948.

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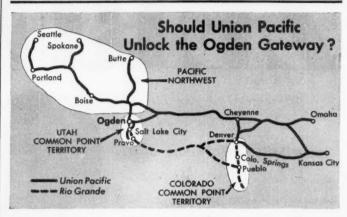
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Photo courtesy Standard Gypsum Company of Cal



TRANSPORTATION



Freight Traffic Battleground

Denver & Rio Grande Western complains to ICC that Union Pacific freezes it out of Northwest by refusing to quote joint through rates on shipments that move over the lines of both.

Two western railroads are fighting for a chunk of the rich and growing traffic of the Pacific Northwest. The rivals: the little Denver & Rio Grande Western and the big Union Pacific. This week the Interstate Commerce Commission is thinking over the Rio Grande's complaint that U.P. is shutting it out of the Northwest.

 Petition—The smaller railroad wants U.P. to let it compete for the freight traffic between the white areas on the map, and for traffic originating east of Denver to the Pacific Northwest. For D.R.G.W., Ogden could be the gateway to the Northwest. So it has asked ICC to unlock the gate.

Right now, U.P. is able to keep the smaller railroad from bringing traffic to the Northwest. Its lines connect with both ends of the Rio Grande. And it also has a parallel line that it can use to bypass D.R.G.W. in hauling traffic between the Midwest and the Northwest.

Union Pacific declares that a green light for D.R.G.W. would take away its own "recognized long-haul reward" for developing the northwestern territory. This week ICC is thinking the matter over. If it decides that D.R.G.W's complaint has merit, it will hold a hearing later this year.

• Joint Rates—Before 1906, says D.R.G.W. in its complaint, railroads serving the Ogden gateway to the Northwest had "competitive joint through rates" beyond Ogden. That is,

a shipper could use any railroad and

get the same rate. In 1906, U.P. acquired control of the Oregon Short Line R.R. and the Oregon-Washington R.R. & Navigation Co. Thereupon, charges D.R.G.W., Union Pacific cancelled the through rates. Shippers who used U.P. to Ogden got the through rates. Those who shipped to Ogden by other railroads had to pay local rates beyond. · No Choice-Under the rate setup that has existed since 1906, according to D.R.G.W., traffic between the East and the Pacific Northwest must usually move via U.P. to get the lowest rate. That's true even though the U.P. route may sometimes be longer than the Rio Grande's.

Traffic between Colorado commonpoint territory and the Northwest must go via U.P. from Denver to get the lowest rate, though that route is usually longer. (In a common-point territory, all shipping points are lumped together for rate-making purposes. Rates from any of them to a given outside point are the same.) And traffic between Utah common-point territory and the Northwest area must generally go the whole way via U.P. to get the lowest rate.

What particularly burns D.R.G.W. is that while the war was on, and when the U.P. line was blocked by snow last winter, U.P. allowed shippers to use the Rio Grande at joint through rates. If the through rate is O.K. in emer-

e through rate is C



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1ST ANNUAL INTERNATIONAL EXPOSITION PERMANENT HOME . INDIANA STATE FAIRGROUNDS INDIANAPOLIS OCTOBER 8-15 gencies, asks D.R.G.W., why not all the time?

• Transit-D.R.G.W. also charges that the present rate situation makes it hard for shippers using its lines to take advantage of "transit privileges." Under one such arrangement, carload shipments can be unloaded and processed, or stored indefinitely, while theoretically en route to a more distant point.

Another such privilege allows shippers to consign carload lots to one destination, then redirect them-at the new through rate-if a better market develops somewhere else. This is par-ticularly valuable for perishable goods.

Since D.R.G.W. can't offer shippers a through rate to the Northwest, it loses a lot of this sort of business, according to its complaint.

· Delay-Why did the Rio Grande wait all these years to begin its attack on U.P.? The answer is that before 1940 it could get no help from ICC. Before 1940, the commission couldn't legally establish a rate that would "short-haul" a carrier. "Short-hauling" means turning freight over to a second railroad before the first railroad has hauled the freight as far as possible on its own tracks.

For instance, if a freight shipment from Kansas City to Ogden were shifted to D.R.G.W. at Denver to finish the

trip, U.P. would be short-hauled. In 1940, however, the Interstate Commerce Act was amended to permit short-hauling. At that time, the Rio Grande was in the midst of a reorganization which was not completed until 1947. The road is now in better financial shape, and is ready to take on its big rival.

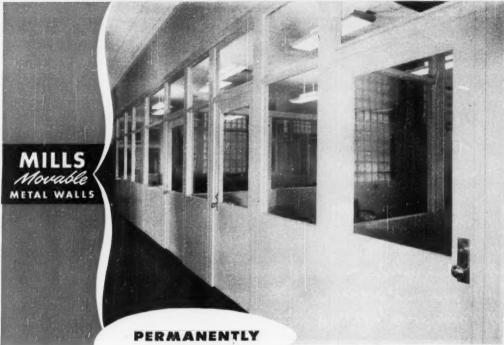
CARS FOR RENT AT AIRPORTS

Airport car-rental business is booming. This week, Warren Avis, Detroit Ford dealer who is president of Avis Airline Rent-A-Car System (BW-Mar. 12'49,p26), announced that in the last two months, his firm had tripled its total number of airport installations by adding 24 new cities to its system.

Of the total of 36, Avis owns only the one at Detroit's Willow Run Airport. The rest are licensed to operators in the individual cities.

In major cities in the system, fleets of cars are maintained at the airport so that incoming passengers may rent them, use them for their business or vacation, and then return them on departure. In smaller cities, where volume does not warrant a fleet, a passenger may wire ahead for a car and it will be waiting when he arrives.

Four major airlines are now under contract with Avis to promote the service in seat packets and through ticketenvelope stuffers: American, Capital, Eastern, and United.



PERMANENTLY DISTINCTIVE

yet easily adapted to changing needs

TODAY'S BUSINESS INTERIOR must reflect solidity and permanence, refinement and good taste—and at the same time be easily adapted to changes in space requirements. Mills Movable Metal Walls are designed to meet this need.

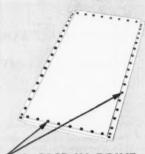
Solidity and permanence are achieved by exclusive Mills features like all-welded panel construction and sound deadened panel surfaces. They are insulated and sound-proofed, and correctly engineered for structural stability. Of refined architectural design they are available in a wide range of attractive colors in baked-on finishes specially treated to eliminate harsh light reflection.

As space needs change Mills Movable Metal Walls may be rearranged to fit the new layout—quickly, easily, and at low cost. The entire change can often be made overnight or during a week end.

We'll be glad to send you a 44 page easy-to-read booklet that will give you full details. Just ask for Mills Catalog 49-0.

THE MILLS COMPANY • 963 Wayside Road • Cleveland 10, Ohio

Bulldog Electric Products Co., Detroit, Michigan Architects: Jahr & Lyman



A CASE IN POINT

Mills panel sheets are welded to panel frames—an exclusive construction feature for which there is no quality substitute.

SPECIFY MILLS FOR

All-Wolded Panels • Sound Dead Surfaces Glareless Finishes • Scientific Sound-proofing • Easy Erection • Maximum Mobility Superior Architectural Design

C The Mills Co.

MILLS Movable

METAL WALLS

P.C. Turner owes \$342,95 William Reimer H Norman over 279.50 H Norman ower 279.50 P.C. Turner ower 342.95 H Norman owes 279.50 P.C. Turner owes \$342.95 4. Morman owes \$279.50 P.C. Turner owe H Morman owls 279,50 P.C. Turner P.C. Turn H Norman owes \$279.50 H. norman ones 279,50 P.C.T. H Horman owes \$275 H Morman owls H Norman owes 12, H Norman owes \$ 279.50 H. Norman ones \$279,50

Memorized your accounts receivable lately?

ONE OF THE most important sources of ready cash you have—and one assurance that you'll be able to keep on doing business—is the money owed to you by customers.

And if your records of the amounts owed should be destroyed by fire, flood, explosion, or lost through burglary or theft—only by remembering names and figures exactly could you avoid a serious loss.

Don't ever run the risk of putting your business in such a spot. Ask your Travelers agent or broker to tell you about Accounts Receivable Insurance.

He will also be glad to tell you about insurance for your sales records, blueprints, legal papers, and other valuable documents.

- Remember, your accounts receivable ledgers, your records, all your valuable papers are subjected to the same hazards as the rest of your property.

You need adequate protection for them through insurance. Let your Travelers man arrange it today.

MORAL: INSURE IN THE TRAVELERS

ALL FORMS OF INSURANCE AND SURETY BONDS

The Travelers Insurance Company, The Travelers Indemnity Company, The Travelers Fire Insurance Company, The Charter Oak Fire Insurance Company, Hartford 15, Connecticut. Serving the insurance public in the United States since 1864 and in Canada since 1865.



WOOD TRESTLE diverts traffic from old bridge being torn down. A makeshift . .



"CONTROL TOWER," in baggage car, houses signaling equipment. It's the way . . .

The Reading Solves a Bridging Problem

When Philadelphia decided to start widening Vine St. last year, the Reading Co. got set to rip up its timetables. For the project meant tearing down the railroad's Vine St. bridge—a vital traffic link just three blocks from its mid-city terminal.

• Engineering Feat—Today, although the bridge is partially demolished, the Reading still has 500 trains a day rolling in and out of the station. And to everyone's surprise, the great majority rolls on time.

How the road has kept its schedule is the story of an ingenious engineering plan. Part of it involved building a temporary two-track trestle to divert traffic from the existing span. That made it possible for work crews to rip up two of the five tracks on the old

overpass and start demolition work. The rest of the plan covered an elaborate scheme for traffic control (13 tracks narrowed into the five on the old bridge).

To handle a new signal network to cover the construction area, engineers set up a baggage car on a concrete base and turned it into a ground-locked control tower. The "tower" has worked so well that even with only three switches in place of the original seven on the bridge, there hasn't been a single accident.

Construction work on the new bridge, which will be concrete with a stone facing, is being handled by Golder Construction Co. The job is slated for completion next July. Total cost: \$1.6-million.



Even with inflated fuel costs, HEATING bills come tumbling down when THER-MOBLOC's forced circulation of live, warm air is used to replace the costly cumbersome systems that are out-dated by today's needs. Savings are impressive enough for top management's attention! Get the facts from this bulletin.



Economical to buy and install. Fully automatic, no attendant required.

High efficiencies—THER-MOBLOCS give 82 to 86% using GAS or OIL. Heat 3000 to 4000 sq. ft. without ducts or piping.





Connect THERMOBLOC to fuel and power line and start heating—ideal for plants, warehouses, etc.

Flexible—each THERMO-BLOC works independently—start up only those needed—when needed use them for cool air circulation in summer.



THERMOBLOC DIVISION

PRAT-DANIEL CORP. Manufacturers of the well-known Thermix Power Plant Equipment

68 Water St., East Port Chester, Conn.

Gentlemen:	
Please send a	me your New Executive
bulletin on 11	
Name	Title
Company	

Shrink Him and Production Costs Go Down ...



URGENTLY NEEDED cost reductions can only be won through increased production efficiency. But note this fact: material handling is your biggest single source of immediate savings.

If a pharmaceutical laboratory can cut glassware handling time $87\frac{1}{2}\%$ by using hand lift and fork trucks, surely the planned application of Yale material handling machinery can produce substantial savings in *your* business. If a stove manufacturer can save 14,400 manhours yearly with one motorized hand lift truck, obviously efficient handling can lower *your* production costs appreciably.

Wherever management really goes to work on handling operations, costs tumble. To help you save where you can save the most, Yale produced *The HOW Book of Cost-Cutting Material Handling*. This practical guidebook dem-

onstrates the efficiency of Yale Material Handling Machinery and gives you a proved method of analyzing the cost of your handling routine. Write for your copy today. The Yale & Towne Manufacturing Company, Department X-9, Roosevelt Blvd., Phila. 15, Pa.



TOOLS THAT KEEP INDUSTRY "ON THE MOVE"

INDUSTRIAL DIAL SCALES . HOISTS-HAND AND ELECTRIC . TRUCKS-HAND LIFT AND POWER

Why CAB O.K.'d Northwest's Loan

When an airline wants to borrow money from RFC, or get an RFC guarantee on a bank loan, it has to get an O.K. from the Civil Aeronautics Board first.

• Loan—Recently, Northwest Airlines borrowed \$21-million from a group of banks headed by Bankers Trust Co., of New York. The banks loaned \$9-million outright, but insisted on an RFC guarantee on the other \$12-million (BW—Jun.25'49,p37): CAB gave its approval on July 28. But it wasn't until last week that it told the public why it had done so.

Northwest wanted the money to buy 10 Boeing Stratocruisers, plus the needed spare parts. Four are to be used on the line's domestic routes (BW—Aug.20'49,p28). The others will fly

the overseas routes.

• Reasons—CAB announced that it had voted three to one (one member didn't vote) that Northwest's "present and prospective earnings" justify the guarantee. But it made it quite clear that its action was not a precedent; that it would not "automatically underwrite" future moves by Northwest's management. The one dissenting member, Oswald Ryan, questioned whether there was enough potential passenger traffic on Northwest's routes to make the use of Stratocruisers economical.

The loan is at 4%; \$1-million of it is payable each quarter starting July 1, 1950. Northwest lost about \$787,000 last year, about \$1.1-million in 1947. But for the first seven months of 1949, it reported a net income of \$1.1-million.

JUNKET FOR NEWSMEN

American Overseas Airlines came up with a new twist on an old promotion trick this week. It brought a group of 50 publishers, editors, and writers from 14 western European countries to the U.S. for a two-week tour.

Many airlines—both American and foreign—have taken American newsmen on all-expenses-paid trips for the publicity value involved. But this is the first time such a large group of European journalists have ever been taken on a junket to the United States.

The group is getting all the trimmings. The tour includes stops at: San Francisco; Los Angeles and Hollywood ("luncheon with the stars"); San Diego ("a day with the U.S. Navy"); Fort Worth; Detroit ("a day with the auto industry"); Washington; New York ("a traditional New York welcome" and a major-league baseball game).

The 12,772-mi. jaunt will be made in one of American Overseas' new Boeing Stratocruisers.



ANNOUNCING HIFECT*...the newest and finest printing paper in the LEVELCOAT* family White as new-fallen snow...smooth as

a forest pool...indeed this new Hifect* coated book paper is truly elegant. Brightness, beauty and splendid printability make it perfect for black and white or brilliant color. Permanence and folding endurance make it inevitably the right choice for broadsides...booklets...house organs...magazine inserts...catalogues... or any fine letterpress printing. With Hifect as its new top-quality leader, the Levelcoat printing paper family is now completely balanced—providing an excellent range of distinguished coated papers.

GIVE YOUR PRINTING THAT LEVELCOAT WES



LEVELCOAT* printing papers are made in the following grades: Hiffect*, Truffect*, Lithoffect*, Multiffect* and Rotoffect*.



KIMBERLY-CLARK CORPORATION . NEENAH, WISCONSIN

Employers Mutual Group Insurance A NEW INVESTMENT FOR INDUSTRY



...brings substantial benefits to the employer and furnishes protection to the employee!

Farsighted employers, in increasing numbers, have found that providing Employers Mutual Group Insurance for their employees is the wisest of new investments. The employer is rewarded in many ways when he furnishes round-the-clock protection against income-loss from illness—and against heavy hospital-surgical-medical expense due to "after-hours" accidents.

He sees his production bettered in quality and quantity... operating and production costs lowered... company loyalty increased through newwon good will!

The employee, freed from financial worries in the event of illness or disabling accident, takes added personal interest in his job and his company—for he feels that he "belongs," and that he as an individual counts in his employer's scheme of things.

With all its manifest advantages to employer and employed, the cost of Employers Mutual Group Insurance is lower than you may think. Weighed against its many mutual benefits, the cost is negligible. May we suggest that you write on your letterhead for our booklet, "A New Investment for Industry"? It will involve no obligation.

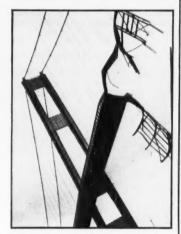
Employers Mutuals write: Workmen's Compensation— Public Liability—Automobile—Group Health and Accident—Burglary—Plate Glass—Fidelity Bonds—and other Casualty Insurance. Fire—Extended Coverage— Inland Marine—and allied lines. All policies are nonassessable,

EMPLOYERS MUTUALS of WAUSAU Home Office: Wausau, Wisconsin - Offices in principal cities - Consult your telephone directory

EMPLOYERS MUTUAL LIABILITY INSURANCE COMPANY OF WISCONSIN - EMPLOYERS MUTUAL FIRE INSURANCE COMPANY



NEW bridge at Tacoma has progressed as far as cables for workmen's catwalk. The necessity for the new 2.800-ft. span came about because . . .



OLD span across the Tacoma Narrowsthen the world's third largest suspension bridge-shook apart in a 42-mph. wind back in 1940

Tacoma Bridge Rises Where First Blew Down

Sometime late this year, workmen will finish the job of stringing the suspension cables for the new Tacoma Narrows bridge. When finally completed, the \$13-million structure will carry four lanes of traffic as against its predecessor's two lanes.

The Washington State Toll Bridge Authority has been dogged by some poor luck with its new venture. Earlier this year the Northwest earthquake slowed construction. Then a fire in June did \$300,000 worth of damage.

Do you sign checks?



Here
is the
new
model
Controlled
Signature
Protectograph

Faster check signing!

Triple protection—two locks plus control meter!

Improved, easier operation!

New streamlined beauty!

Better now than ever before—the new model Todd Controlled Signature Protectograph with improved features that give you *triple* control over check issuance... speed check handling...eliminate check-signing fatigue.

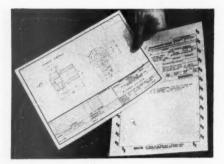
With this Todd machine, you get protection not available with easy-toduplicate pen and ink signing—and absolute, *locked* numerical control over signatures. New, raised platform insures fast check feeding and insertion—think of signing checks at the rate of 50 a minute! And these are only a few of the features of this beautifully designed check signer!

Find out more about the Controlled Signature Protectograph. Just mail the coupon below for full information. (If you already have a Todd check signer, please note on the coupon—we'll tell you about our liberal Trade-in Plan.) Mail coupon now.

THE TODD CO., Inc., Rochester 3, N.Y. Please give me full information about the new model Todd Controlled Signature Protectograph, without cost or obligation. I have have not a Todd check signer.	Toold
Firm	COMPANY, INC.
Address	Todd
City Zone State	ROCHESTER NEW YORK SALES OFFICES IN PRINCIPAL CITIES
By	DISTRIBUTORS THROUGHOUT THE WORLD

If you copy ANYTHING typed, drawn or written, you need OZALID!

It's Simple...



Take any letter, sales report, form, drawing . . . anything typed, drawn or written.

Put it next to a sheet of any Ozalid material (paper, plastic, cloth, black, blue, red, sepia) and then feed it into an Ozalid machine.

It's Quick ...

In as little as 25 seconds, you (anyone can operate Ozaiid) will have a dry, positive, exact duplicate of your original material!

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Write today on your letterhead for FREE booklet which tells the full Ozalid story. Or consult your classified directory for local distributor.



use OZALID!



A Division of General Aniline & Film Corporation. "From Research to Reality"

TRANSPORTATION BRIEFS

Pickup and delivery charges by eastern railroads (on the basis of weight) were authorized last week by ICC. Hitherto such service has been free.

A suburban airport near New York City—Westchester County Airport—will be served with scheduled flights by American Airlines. The line has used the field when La Guardia is weatherbound. The new service will start with one round trip daily.

Natural gas from the Southwest reached New York City last week through Texas Eastern Transmission Corp.'s pipeline. New York & Richmond Gas Co. figures it will save Staten Island consumcrs \$200,000 annually.

One-plane service from the Southeast to the West Coast will go into effect for the first time. CAB has given approval to the agreement between American and Delta airlines to fly their DC-6's over each other's routes.



Ten Lanes to Dallas

Dallas has just completed the first twomile section of its \$21-million Central Expressway. When complete, the 10-lane superhighway will connect the city's Northside suburbs with the downtown business area. It will handle some 100,000 cars a day at a 45-mile-an-hour clip. The completed section above cost \$2.5-million; an additional \$2.7-million is under contract. The cost is being shared by Dallas, the state of Texas, and the U.S. Bureau of Public Roads. **OREGON'S SCENERY ATTRACTS TOURISTS...**

OREGON APPAREL ATTRACT

...both provide sales stimulus
for YOUR advertised product
in the RICH OREGON MARKET

This is Oregon: a wealth of beauty... mountains, valleys... one picturesque vista after another.

And this is Oregon: a wealth of another kind... one prospering industry after another. Apparel manufacturing looms importantly in the state's industrial diversification... puts ready money in Oregon's jeans... fashions countless sales opportunities for your product or service. Today made-in-Oregon swim suits are famous from Hollywood to Miami... ski togs at Sun Valley and St. Moritz carry Oregon labels. Casualwear in wide variety, wool shirts, jackets, slacks and denims... all help to build a \$27 million Oregon apparel volume that knows no season.

There's an all-season sales-producer in Oregon—The Oregonian.

In this dynamic medium your advertising story is told with a profit-producing punch... as only a newspaper can that is first in circulation and first in influence in the rich Oregon Market of 1¾ million persons.

That's why The Oregonian is first in advertising volume!





WOMEN'S COATS AND SUITS, multimillion-dollar business with increasing acceptance for names like Rueben, Modish, Mademoiselle-Vogues. Milady's demands in the young'n'growing West started it . . . now Eastern buyers also look, rave, order!



MEN'S OUTERWEAR, bearing famous labels like Pendleton and Benmar, find ready buyers in world marts. Need for rugged wool shirts, jackets and field clothing among outdoorsmen keeps this industry expanding in the thriving Oregon Market.



JANTZEN AND WHITE STAG are creators of nationally known swim suits, play clothes, ski togs. These and other firms put Oregon first in manufacture of active sportswear. Their huge year-round payrolls provide another outlet for what you have to self.

The Oregonian

The Great Newspaper of the West

SELLS THIS MARKET
SELLS THIS MARKET
FOR YOU AT LOWEST
ADVERTISING COST!

REPRESENTED NATIONALLY BY MOLONEY, REGAN & SCHMITT, INC.

CLEAN Sanitary LINENS MEAN BETTER WORKING AND LIVING CONDITIONS



IN FACTORIES. Employees like soft sanitary cotton towels in their washrooms. Reports show it increases morale and production. Let Servilinen, America's finest rental Towel and Linen Supply Service, answer this problem, You'll be amazed at the low cost rentals.



IN STORES. Attractive, well-fitting uniforms, smocks and coats dress up your business and help save employees' precious clothes. Investigate Servilinen's complete line of washable cotton apparel in a wide range of colors and styles. Let Servilinen'dress-up'your business.



IN RESTAURANTS. Soft, inviting cotton napkins and tablecloths flatter your customers. Means more repeat business. Let Servilinen supply these items to you on an amazingly low cost rental basis. Call the Servilinen supplier in your city. He is a member of the Linen Supply Association of America. Let him show you how Servilinen can be good for your business!

WRITE FOR FREE BOOKLET

Get this interesting story of how Servilinen can solve linen and towel supply problems for you. Interesting —informative.

WRITE

THE LINEN SUPPLY ASSN. OF AMERICA 22 WEST MONROE STREET CHICAGO 3, ILLINOIS

CITIES



NUMBER 1: Largest postwar plant in Atlanta is G. M.'s assembly unit. Next is . . .



NUMBER 2: Ford's 14-acre assembly plant. They're outstanding examples of how . . .

Industry Spreads in Atlanta

The gate city to the Southeast still hangs onto its crown as a major distribution center. But new plants, ranging from food processing to iron and steel manufacture, are giving it an industrial cast.

One morning in 1836 an engineer drove a stake into the red clay atop a Georgia ridge. He marked what was to be the city of Atlanta.

• Crossroads Town—Because the stake was the end of the new Western & Atlantic R. R., the town that grew up was called Terminus. By 1843 it had another railroad and a new name, Marthasville. Two years later the name was changed again, this time to Atlanta, after the Western & Atlantic R. R.

The city's growth, like its name, has been tied to railroading ever since.

Today with eight railroads running into its two stations (the Terminal and the Union). Atlanta is truly the gate to the Southeast. But it has grown to be far more than just a distribution center. Its industrial roster is crowded with the names of the nation's leading corporations. And its local industries

thrive on such a diversified fare that Atlanta is always among the last to feel the shock of an economic bump.

 No Mourners—To understand Atlanta's rise, you have to understand something of the attitude of the men who built it. For the railroads alone

aren't the key to its prosperity.

When the Civil War ended, a lot of southern cities settled back to mourn the life that was gone. But not Atlanta. It had business to do. Its leaders went about rebuilding; they made a concerted drive to bring in new capital, mainly from the North. They stumped the country selling Atlanta as the pivot-point of the new Southeast. And their campaign was a success.

The insurance companies were the first to pick Atlanta for their sectional headquarters. Then came the cotton traders, moving in from all parts of the

Are your printing costs too high?

A MESSAGE OF VITAL IMPORTANCE TO YOU AND/OR YOUR PRINTER

E ing the past nine years. In the same period, wages of these workers rose 167%. This increase is directly reflected in the tremendously high cost of printing today.

The cost of office forms, stationery, envelopes, advertising literature, bulletins, shipping tags, etc., represents a substantial part of business overhead. Today's intensified selling demands more, not less, printing. Administration and record' keeping, in which printed forms are used, does not shrink in direct ratio to volume. All these things are essential to business progress . . . yet their cost continues to pyramid.

There is an answer... at least in part. With a Davidson Dual, either you or your printer can produce a large part of your requirements for considerably less than the usual cost. This is a fact that has been proved over and over again.

The Davidson Dual gives you high quality offset reproduction from either paper or metal plates . . . black and white or multi-color . . . with excellent line and halftone work and close register. It will also reproduce from type, electrotypes and rubber plates, providing you with the best method for each job.

YOU AND/OR YOUR PRINTER SHOULD GET THE FACTS ABOUT THE DAVIDSON DUAL

This machine can be installed in your own office and operated by one of your employees. It will quickly pay for itself through direct savings and continue to save for you for years. Or . . . in the hands of your printer, it will materially reduce the cost of the work you purchase from him and still give him his normal profit.

So...if your printing costs are too high...if you want to make worthwhile savings...get the facts today. See your local Davidson Sales and Service Agency or write us.

DAVIDSON MANUFACTURING CORPORATION 1034-60 W. Adams St. • Chicago 7, Illinois



A Generation of Experience in the Manufacture of Office Equipment



Sound-control combined with fire-safety in one material! Sounds like something extra—and that's just what you get if you use Fiberglas Acoustical Tile in your ceiling. You get extra high sound-absorbing efficiency—up to 85%—in a material so fire-safe it is rated "incombustible" when tested under Federal Specifications SS-A-118a.

And that's not all! Here's another extra—A BIG PLUS—Fiberglas Acoustical Tile won't buckle, warp, expand or contract even where humidity is high. Its glass fibers are unaffected by moisture and thus will not rot, decay or deteriorate with age. This stability preserves the architectural beauty of ceilings of Fiberglas Tile and means extra value to you in lower maintenance costs and longer ceiling life.

Your comparison will prove that Fiberglas Acoustical Tile gives you many extras found in no other material. Write for the name of your nearest approved Fiberglas applicator who can give you information and a free estimate. OWENS-CORNING FIBERGLAS Corporation, Dept. 803, Toledo 1, Ohio.

*Fiberglas is the trade-mark (Reg. U. S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with glass fibers.

FIBERGLAS

A NAME THAT MEANS
EXTRA VALUE IN
ACOUSTICAL MATERIALS

South. Food processors, textile manufacturers, chemical plants, printers and publishers followed. Between 1864 and 1900, the city's population jumped from 12,000 to nearly 100,000.

 Master Plan—Oddly enough, Atlanta had no over-all plan for nailing down out-of-state manufacturers. Through all the reconstruction era and the years that followed, the campaigns, though guided by the Chamber of Commerce, were pretty much individual affairs.

But in 1925, the chamber felt the time was ripe for a united drive. Under its direction, a \$1-million advertising campaign was launched to spread Atlanta's story—good labor supply, plentiful land, and low taxes—across the country. For four consecutive years Atlanta pages appeared in leading news and trade publications. As a direct result, 594 companies opened new branches in the city. All told, they added 16,911 people to local payrolls and pushed up income by \$29.2-million.

Today, after 20 years, the original campaign still brings in customers. In the first half of 1949, 197 new companies set up for business in the city. Of the total, 48 were manufacturing plants, 87 branch offices or warchouses. New businesses, as a whole, showed a gain of 5% over the same period of 1948.

To keep the gains the city has made, and to bring in new outsiders, the chamber, under President Elbert P. Tuttle is now readying a 10-year "Keep Atlanta Ahead" drive. The fund-raising part of the program already is out of the way.

• Gains—Sparkplug of the chamber's Industrial Bureau, which bosses the new-business drives, is industrial engineer Frank K. Shaw. Shaw has been in on the business-getting programs since their very beginning. He paints this sort of picture of the gains Atlanta has made since the war:

All told, about 4.8-million sq. ft. of plant and warehouse space have been added. Total expenditures for plant and equipment run close to \$45-million; new payrolls come to \$15-million.

Biggest of the postwar developments is General Motors' \$12-million Buick-Oldsmobile-Pontiac assembly plant. Built on the extreme north end of the city, the plant has about 1-million sq. ft. of space, it cumploys 1,700 workers

ft. of space; it employs 1,700 workers. Ford Motor Co.'s \$7-inillion assembly plant is Atlanta's second biggest project since V-J Day. The Ford plant has close to 1,300 workers under its 14-acre roof. Other additions are new plants for Electric Storage Battery Co., Pittsburgh Plate Class Co., Eagle-Picher Co., Westinghouse Electric Corp., and Boyle-Midway Inc. U.S. Rubber Co. and Firestone Tire & Rubber Co. have finished new warehouses. Soon to be started are a new container



stands between your financial resources and accidental bodily injury

WHY? Because this man—your local U.S.F.& G. Agent—offers you the Schedule Accident Policy which allows you to select the coverages best suited to your individual needs . . . and in the amounts you desire.

WHAT DOES HE OFFER? As many of these benefits as you want: medical, surgical, nursing and other expenses paid; fixed sums for loss of life, limb and sight, for fractures and dislocations; compensation for time lost when injured.

HOW DO YOU REACH THIS MAN? He is as near as your telephone. Call your local U.S.F.& G. Agent and ask about this flexible package of insurance protection. He'll know what to do about solving your personal insurance problems. Consult him today!

FOR U.S.F.& G. SERVICE: Call Western Union by number and ask for Operator 25, who has name and address of your nearest U.S.F.& G. Agent.



United States Fidelity & Guaranty Company, Baltimore 3, Md.
Fidelity & Guaranty Insurance Corporation, Baltimore 3, Md.
Fidelity Insurance Company of Canada, Toronto

CONSULT YOUR INSURANCE AGENT OR BROKER
AS YOU WOULD YOUR DOCTOR OR LAWYER



easy to install and service

-THE NEW CARRIER UNIT HEATER

Notice the clean lines of this sturdy, good-looking, quiet unit. For a quality store, restaurant, garage or factory, you can't get better low-cost, dependable heat with steam or hot water. Available in many capacities, this unit can be completely disassembled by removal of only four bolts and screws. No trouble, no fuss!

For the convenience of modern, economical gas, choose the money-saving Carrier Gas-Fired Unit Heater with an "Aluminized Heart." And for large factories and warehouses, there's a wide choice of big-capacity steam or hot water Carrier Heat Diffusers for floor or ceiling mounting.

Carrier know-how and engineering precision assure you maximum efficiency and economy in whichever Heating Unit you install. For information, call your Carrier dealer, listed in the Classified Telephone Directory. Carrier Corporation, Syracuse, New York.



INDUSTRIAL HEATING

and glass-block plant for Owens-Illinois Glass Co., a finishing plant for Eastman Kodak Co., and a paint and insecticide plant for Sherwin-Williams

• Help That Counts-Finding facilities for new business has never been much of a problem for Atlanta. The chamber's reply to queries from prospects is: "If we don't have the kind of building you want, we will help you get one built-and fast. We have better than 2,000 acres of industrial sites to play with."

It's true downtown office space is still tight. But it should loosen up within the next year. Atlanta's veteran builder Ben J. Massell is putting up a new \$2.5-million building that will be leased entirely by the federal government. The office space will consolidate many of the 85 federal agencies now scattered around the business district. The U.S. payroll in Atlanta runs to 16,000 people.

• Growing Pains-Atlanta's gains since the war have not been made without some growing pains. The population has climbed to an estimated 590,000 within the metropolitan area. The need for municipal planning has become

In 1947, a law set up an Atlanta Metropolitan Planning Commission. It is now working out a master plan for the probable future locations of residential areas, industries, transportation, utilities, schools, and parks. It already has tackled the idea of annexing added territory and setting up a borough system, similar to New York's.

• Industrial Complexion-Because of Atlanta's role as a distribution crossroads, people tend to overlook its importance as an industrial center. Actually, the city last year accounted for an estimated \$450-million of manufactured goods. That compared with \$165.7-million in 1939.

Food processing today is the largest industrial group; it employs about 3.7% of the metropolitan area's total work force. Behind it come textiles, chemicals, furniture, paper, candy, printing, and iron and steel products. Industrial employment comes to about 75,000 out of a total city employment of 267,000.

About 25% of the area's workers are unionized; but the sector, as a whole, is one of the quieter ones on the labor front. There were only 27 work stoppages in the entire state last year.

For the past few years, Atlanta has been the headquarters for the Dixie organizing drives of both the C.I.O. and A.F.L. But the two unions have concentrated most of their efforts on points outside the state.

· Market Place-Despite its growing industrial side. Atlanta still hangs onto its crown as distribution center for the Southeast. Its immediate trade area



GATE CITY SALESMAN Frank K. Shaw sparks Atlanta's drives for new business

spreads out in a radius of 100 mi. around the city. But wholesalers, jobbers, and sales offices, operating out of Atlanta, blanket the entire southeastern region. Close to 15,000 merchants annually buy about \$25-million worth of apparel alone from the Atlanta Manufacturers & Distributors Assn.

Last year sales by the city's wholesalers came to \$1.5-billion, more than three times what they were in 1939 (the last year of the U.S. Census of Busi-

The cluster of stores in the city's downtown shopping district has grown even thicker since the war. Last fall Franklin Simon opened a new \$2-million store, its most important unit outside New York City. Peck & Peck of New York has a smaller outlet under construction now. Rich's, Inc., Davison-Paxon Co., and Sears, Roebuck & Co. all have finished major expansions recently

In 1948, Atlanta's retailers racked up a total sales volume of \$693.7-million. That compared with \$172.2-million in 1939. Retail sales for the first seven months of this year were virtually unchanged from the 1948 showing.

• Transport Links-Atlanta's transportation net is, of course, one of the main reasons it has been able to keep its rank as a hub city. About 275 passenger and freight trains roll in and out of the city each day. This service would be even more efficient if all the eight roads serving the city operated out of one terminal. That's something the city leaders hope to see before the next 10 years are out.

Besides its rail links, Atlanta has a municipal airport that handles about 160 planes of 10 airlines each day. A proposed expansion now under study would add three runways, one 7,800 ft.

than the "FASTEST THING IN FASTENINGS" SPEED NUTS* in continuous strips

Now, assembly costs can be lower and savings higher than ever before. By producing flat-type SPEED NUTS in continuous strip form—Tandem SPEED NUTS—Tinnerman helps solve the critical problem of what to do about production costs.

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SPEED NUT permits the operator to break the strip away quickly, easily and cleanly—ready to move to the next location. Another saving—there's no loss from SPEED NUTS dropped or the floor.

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How this Cooper-Bessemer engine saves \$1,148 a month at Hominy, Oklahoma

A CROSS the country hundreds of small and mediumsized cities (and private industries, too) are in line for big savings on the cost of power. These are the towns that have their own power plants, powered by veteran steam engines or even by more modern oil-burning diesels.

In most of these places natural gas is available . . . not always in reliable volume, but that doesn't matter. By switching to Cooper-Bessemer gas-diesel engines, gas can be used to full advantage, can be burned in practically any combination with oil as conditions dictate. Not only is the gas much less expensive than other fuels, but these revolutionary Cooper-Bessemer gas-diesels give the highest engine efficiencies known today! That's how they save so much at Hominy . . . and in scores of other towns and plants already converted to Cooper-Bessemer gas-diesel operation.

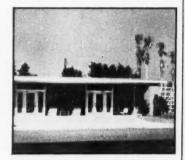
Cooper-Bessemer engineers are constantly working out

new ideas to cut the cost of engine power. Their developments are applied to diesels for marine and locomotive service, and to gas, diesel and gas-diesel engines for all kinds of stationary service. If you have a stake in stationary power, be sure to find out about the new things being done by one of America's oldest engine builders.



long. Total cost has been estimated at about \$5-million.

• Expressway - Another transportation improvement Atlanta has wanted to make for a long time is an automobile expressway. This year saw construction well along on the first leg of a northsouth system. The expressway is part of an over-all program to speed up traffic flow in the city. When the work is finished in five years or seven years, the bill will come to about \$40-million. · Cokes-But despite its colorful history and all its advances, Atlanta probably means just one thing to many people-Coca-Cola. First concocted by the fabulous Asa G. Candler, Cokes had their beginning in a kettle in the back of his drugstore in 1886. Last year the company had flourished in the Atlanta air to a point where it could claim \$234.9-million in sales, paid dividends of more than \$22.3-million.



GREETING STATION gives Florida tourists latest travel data. Behind is a . . .



PICNIC GROUND where vacationers can unpack box lunches under lofty palms

Welcome Stopoff

The state of Florida is going to give visitors a regal welcome this winter. Next month it will open an official greeting station just inside the Georgia-Florida border at Yulee. Sponsored by the Florida Chamber of Commerce and run by highway-department personnel, the station will have travel guides, trained hostesses, and citrus juices on the house.



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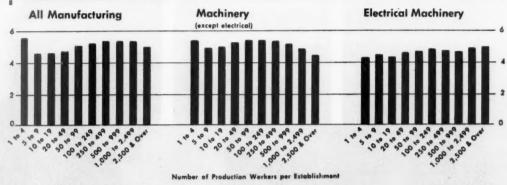
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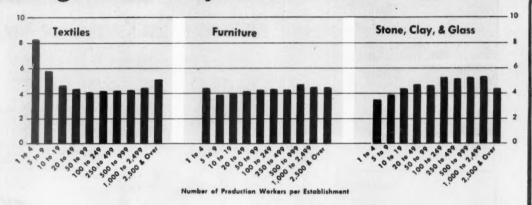
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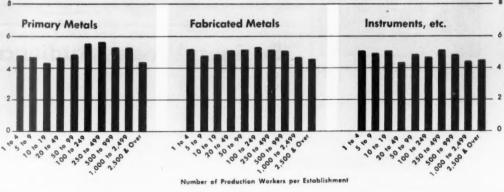


Number of Production Workers per Establishment

Is Bigness Always Efficient? Answer is an



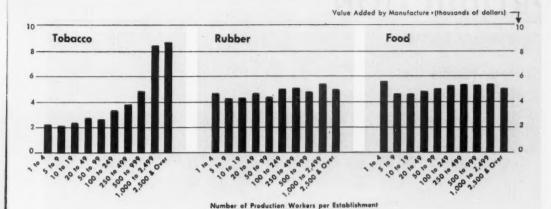
Emphatic "No" in Textiles. But in Most



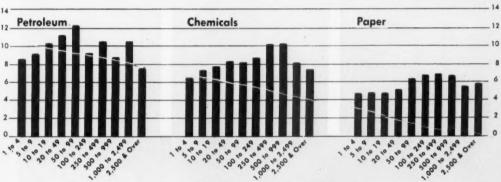
Number of Production Workers per Establishment

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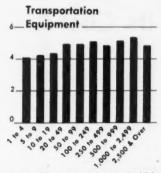


Emphatic "Yes" in Tobacco, an equally...



Number of Production Workers per Establishment

Industries There's an Efficient Middle Size



6

2

0

0

6

0

Number of Production Workers per Establishment

How to Measure Your Own Plant's Efficiency

Critics of "Big Business" always have assumed that large corporations, by their very size, could crowd small competitors to the wall. But they never have had much proof.

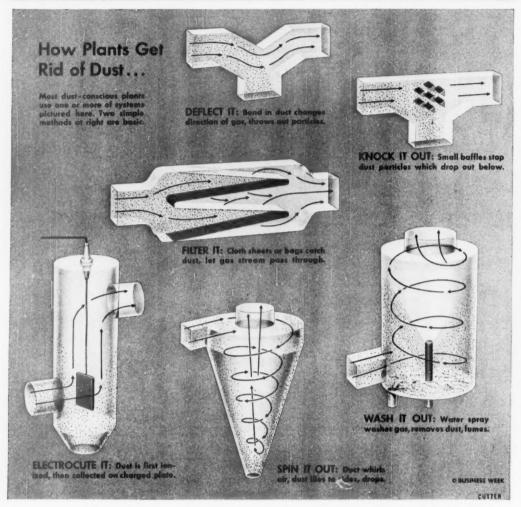
wall. But they never have had much proof.

Now the 1947 Census of Manufacturers has been broken down by size of establishment in terms of each factory's employment. The charts on these two pages should make the trust busters' case—if, indeed, they have a prima facie case.

The units involved in these charts are the individual worker, the size of the plant he works in, and the "value added by manufacture." (Value added by manufacture is defined as the value of shipments less the cost of materials, purchased parts, fuel, and electricity.) The "value added" per worker is, to all practical purposes, a measure of efficiency in factories of various sizes.

OBUSINESS WEEK

PRODUCTION



Air-Pollution Control: Worth Its Cost?

Equipment is usually expensive. But it often pays off in good public relations, happier workers, even actual cash savings.

Smoke control and dust collection are almost always expensive. But they're usually worth it. They can improve your public relations. They will keep your neighbors happy—and your workers, too, by making your plant a better place to work in. But, equally important, when you control smoke, you save money by burning your fuel more efficiently. And the dust you recover often proves useful and valuable.

Smoke control and dust collection don't necessarily work hand in hand. Smoke starts in the furnace room; dust usually out on the production floor. Depending on the setup in the plant, you may be bothered with either of these problems—or both.

• Importance—Because smoke particularly soft-coal smoke—is so easily noticed and so annoying to the public, it has always drawn the big headlines,

particularly in such cities as Pittsburgh and St. Louis. Actually, in the average plant, dust is usually the more important problem. And when the smoke problem does exist, it's usually much more easily solved.

For control of smoke is often nothing more than a matter of good combustion-engineering. After all, the more coal you burn completely out of each ton, and turn into heat, the less smoke you send up the chimney. City inspectors in Detroit, where a smoke-abatement program is just getting under way, say that most companies haven't

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Wheels automatically follow the curves. Saves tires.



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Entirely New Concept in Tandem-Trailer Springing. Utilizes torsion-bars . . . eliminates conventional leaf-type springs.

- Distributes load equally on all tires.
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Hear Harrison Wood in "This Changing World"— every Sunday over ABC. Consult your Local Paper





The Office Manager just broke his lease!

It was a modern building all right—but its old-fashioned wiring couldn't keep up with its busy tenants. Wires from business machines, phones, and lights were strung high and low—just because the building didn't provide enough outlets.

Whether you build or rent, be sure the electrical supply system is adequate. General Electric Q-Floor Wiring provides the flexible system you need.



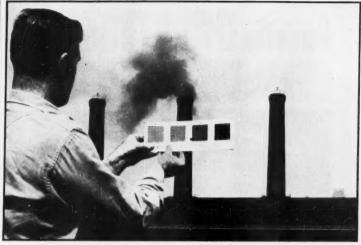
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MEASURING SMOKE DENSITY: Inspector compares four shades on Ringlemann chart with factory smoke. No. 2 smoke is prohibited, for example, in Pittsburgh. There is . . .

examined the economics of their powerplant operations for up to 20 years. So smoke control may often turn out to be just a matter of boning up on your boiler-room know-how and keeping a watchful eye on your chimneys.

ing a watchful eye on your chimneys.

• Dust Problem—Dust, however, is a horse of a different color. It can come out the chimneys of a smoke-corrected furnace as fine, noncombustible grains called fly ash. Or it can float around the shake-out room of a foundry that has already been pretty well modernized.

Dust doesn't help the dispositions of your workers or nearby neighbors. And it won't help your disposition either when you get a cost appraisal on the collection equipment required to cut down the stuff in your plant. You can bank on dust-equipment costing you at least a dollar to install for each cubic foot of air you have to clean.

• Well-Spent?—Several years ago, Union Electric Co. of Missouri, the light and power company serving the St. Louis area, contributed about 10% of the dust that, fell around the city. By 1950 it will have spent about \$3.8-million on the installation of fly-ash collection equipment and other corrective methods. And the fly ash it recovers is worthless.

Spending a lot of money for the collection of useless dust may not sound like good budgeting. But Union Electric thinks it gets its money's worth (1) from good public relations, and (2) by staying within St. Louis' strictsmoke- and dust-control laws.

But charity begins at home, too. Loose dust from a production process can sometimes cause occupational diseases to employees; it almost always causes employee discomfort. So dust control is usually worth while, despite the cost.

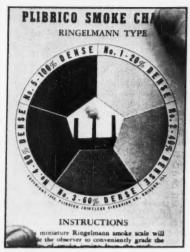
 Prevention—The Monarch Machine Tool Co., Sidney, Ohio, tackled its dust problem at the point of origin instead of putting in a plant-wide collection system.

At Monarch, men in the finishing room cleaned off the rough edges of castings with high-speed grinders. Thus, an employee operating a grinding machine worked in a cloud of fine metallic dust.

So Monarch set grinding stands with grated work tables into the shop floor, and connected them to a down-draft blower system. Sheet-metal guards fence in the table about two-thirds of the way around. Today, as an employee cleans a casting on a work table, the guard catches the flying metal particles, and they are drawn down through the grating. The installation was expensive, and the dust it recovers is worthless. But it has resulted in healthier, more productive workers.

Custom Made—Installation requirements vary from plant to plant. Up to a point, the equipment is mass-produced. But the associated equipment that adapts the dust-collecting unit to the plant usually has to be custom made.

The capacity of a dust-collecting system is measured in the number of cubic feet of air per minute handled by the system. It ranges from a few thousand c.f.m. to perhaps a quarter of a million c.f.m. Air weighs about 75 lb. per 1,000 cu. ft. under ordinary conditions of temperature and pressure. This means a system of 100,000 c.f.m., a fairly representative installa-



ANOTHER CHART for finer measurement. No. 3 smoke is the maximum in most cities

tion, handles about 225 tons of air an hour.

• Four Systems—Dust-collecting units fall into four classes:

Centrifugal or "cyclone." Air forced into a funnel-like duct at high speed forms a cyclone. The dust, being heavier, is spun outward by centrifugal force, and falls to the bottom of the duct, where it's collected.

Electric precipitation. Dust particles are ionized in an electrostatic field; then they collect on a plate charged with high voltage.

Filtration. Cloth bags or sheets, steel wool, or spun glass interrupt a stream of air and catch the dust.

Wet collection. Air passes through water or some other liquid to discharge its dust.

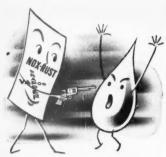
There are no hard and fast rules for choosing a particular collection method. Sometimes an installation may use two or three different collection methods.

• Electric—Electric precipitation is probably the most expensive method. Small units are available in packaged form, but it usually takes from three to six months to build the larger units to order. Whether large or small, they all depend on high voltage for their operation, and high-voltage power supplies are expensive. The larger units may even require their own substations for an adequate source of power.

Most makers of precipitators rate their units at an efficiency of close to 99%. Percentages of efficiency aren't constant, though. A utility in Rochester, N. Y., gets 97% efficiency out of its unit and only 77% from an identical unit in New York City.

Cash Return—Most users of precipitators are boiler and power-plant op-





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WRITE FOR THE FACTS

erators, who have to remove worthless fly ash before it reaches the open air. Occasionally, though, a precipitator operator reaps some return on the dust he collects. A large watch-case manufacturer in Dayton, Ky., collects about \$5400 worth of gold dust a week using the electrostatic method. Gold makes up about a quarter of the collection; the rest is lint, rouge, and base metal. The collection is burned to reclaim the gold.

"We simply couldn't operate without the collection system," a company spokesman says. "Our people would just quit if we didn't have one now. The lint and rouge used in polishing would funnel right up into their faces. Twenty-five years ago, with inadequate systems, polishers were so covered with polishing rouge they looked like a bunch of Indians."

• Cyclone—The simplest, cheapest—and least efficient—type of dust collector is the cyclone. Its efficiency ranges from 65% to 70%. Centrifugal action is greater when the cyclone is smaller. So the collector is usually small for the sake of greater efficiency.

Cyclone manufacturers can jack up the efficiency of the system by joining a number of simple cyclones together. Then the system is 90% to 99% effective. Multicyclones are used widely to remove heavier, coarse particles. They will operate successfully in rock-crushing and cement plants, or in plants where high-temperature dusts, which would scorch bag collectors, are encountered.

Often multicyclones are combined with bag collectors. Cyclones clear the air of heavier dust; then the bag collectors gather the fine stuff which may be valuable to the operator.

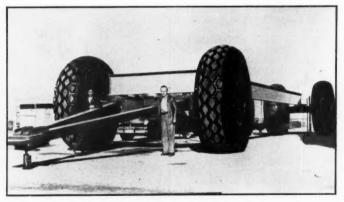
• Filtration—The three types of bag collectors—round, oval, or screen—all work on the same principle. The cloth of a bag becomes impregnated with an initial layer of dust brought in by the air. Dust that follows clings to the original dust film on the cloth. In effect, the dust itself, not the bag or screen, does the collecting.

A bag-filter system consists of a compartment built of sheet metal, a hopper for collecting the dust, and a mechanism for cleaning the filter. The bags can be made of various textile fibers, depending upon the type of air and its temperature. They hang from a supporting frame inside the compartment. Inlet and outlet ducts control the flow of air. A timing device regulates a shake-out mechanism for cleaning the bags.

• Improvement—Oval-bag systems are a slightly advanced form of the round-bag type. Oval bags blow out into a round shape when air is forced through them. When the air shuts off and suction stops, the bags are pulled back into the original oval shape by suspension springs. Changing the shape of the bag from round to oval breaks up the dust collected inside the bag.

Screen-type filters have a number of rectangular-shaped envelopes stretched inside the cleaning compartment. Wire frames inside the envelopes keep their sides from touching under the pressure of incoming air. This type, makers say, has more square feet of cleaning area for each square foot of floor space.

The efficiency of bag collectors varies



Giant Tires for Desert Transportation

Formerly the Arabian American Oil Co. had to knock oil derricks down and carry them in sections across the oil fields of Arabia. The giant dolly above simplifies this operation: Its huge 1.8-ton tires make it possible to transport the heavy derricks intact to new drilling locations. Firestone Tire & Rubber Co. claims that its tires are the largest ever built. They stand 9½ ft. high, have a load capacity of 55,200 lb.



added production...without adding brick and mortar

When a comptroller talks about investment cost necessary to increase the production of machined parts, maybe he is figuring in the cost of increased floor space, too.

Of coarse, you know that Acme-Gridley Automatics often double the production of an ordinary machine without taking up any more space. But it might help to remind him that the new Acme-Gridley Automatics may make even more floor space available in your present plant—that it is not unusual for one new Acme-Gridley to replace two or even four older machines.

Perhaps you will want to have some facts and figures to back up your story. Below is a typical certified case study. Would more of these—on 4, 6 or 8 spindle Chucking Automatics—help you? They're yours for the asking.

CUT THIS OUT FOR USE WHEN YOUR COMPTROLLER WANTS PROOF

AN ACME-GRIDLEY CERTIFIED CASE STUDY

THIS IS WHAT HAPPENED:

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AND HERE'S ONE IMPORTANT REASON:

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Acme-Gridley design. There's plenty of space for timesaving, moneysaving, independently-operated attachments that often save second operations. And more room means easier tooling, easier loading, faster chip disposal. All these are important reasons for faster

> floor-to-floor times on Acme-Gridley chuckers.





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Right now, it's spending at the rate of almost 10 million dollars a day. More than half of its material requirements will come from subcontractors and secondary suppliers—and that means people like you!

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with the installation and the kind of dust being removed. Manufacturers set the removal rates of bag collectors at around 95%, but the percentage is apt to be lower in most installations. A cement manufacturer in the Chicago area gets 85% efficiency out of a bag collector that cost the company \$85,000. The collected dust, it feels, has only a small recovery value, so its removal doesn't mean any great production economy.

Water-Wet collectors are well suited to dust particles that are already moist and have no further recovery value. Wet collection can also handle air or gas of temperatures up to 2,000 F, or containing extremely small particles.

Dust-laden air is sucked into spray chambers by fans, and water is sprayed into the chamber to settle out most of the large grains of dust. Then the air, as fine bubbles, passes through a bath of water where the smaller and remaining larger particles are removed. Finally, the cleaned but wet air filters through a drier to remove the moisture.

 Cheap, but Inefficient—Two other methods can be used to separate dust and air—either by deflecting the air stream away from the heavier dust grains, or by stopping the dust grains with baffles. Neither type costs much to install, and few modifications of original equipment are required.

But the efficiencies of the systems are quite low; for that reason, they are seldom used where large volumes of dust-laden air are involved.

• At the Source—Besides the installation of collection equipment, there is one other alternative for dust reduction: Modify the operation that creates the dust so that dust-climination is a part of its working mechanism.

Obviously, this approach to the dust problem is limited in its applications. But attempts to climinate fly ash within a furnace, for example, have already been successful. Babcock & Wilcox Co., which makes boilers, has collaborated with Commonwealth Edison Co. of Chicago to develop a cyclone furnace that confines 85% of the fly ash within the furnace.

• How It Works—A mixture of crushed coal and air shoots into a tilted, cylindrical burner. The coal-air mixture whips around the shell of the burner in a cyclonic stream. High-speed, high-temperature air comes in at another point along the stream to distill the coal and ignite it. Fly ash melts into slag, and drains to the bottom of the cylindrical burner.

Commonwealth Edison has had one such furnace in operation for two months now. Results have been so successful that it plans to use the same type in all future installations at its plants.

New Method Polishes Steel Before Forming

Prepolishing flat steel before it's formed into a part has always been impractical. Reason: The forming operation marred the finished surface.

• New Process—Standard Steel Spring & Bumper Co., Coraopolis, Pa., and Electric Auto Lite Co., Sharonville, Ohio, are now using a process that licks part of the marring problem. They polish the steel, coat it with a strippable lacquer, press it into a part, and then remove the lacquer. The piece comes out ready for chrome plating or enameling.

Formerly, where the number of identical parts to be made was large and the shape not too irregular, a series of specially shaped grinding wheels did the polishing job after forming. If the shape of the piece could not be adapted to grinding wheels, it had to be ground and polished by hand. The cost of hand-polishing was frequently the largest single processing charge.

est single processing charge.

• How It Works—In the new process, the steel is prepolished in flat form with a set of simple grinding wheels. The lacquer is put on by spraying on the flat steel; it is removed later—usually with a blast of air.

The process, however, has one limitation: It can't be applied to forged parts. Prepolishing steel that's scheduled for forging would be a waste of time because the lacquer wouldn't protest the finish against forging hammers.

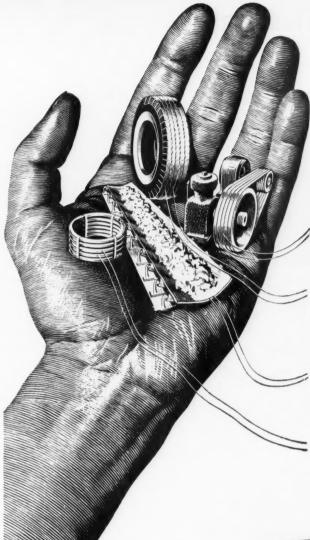
LOCOMOTIVE EXPERIMENT

Another railroad is going to experiment with steam-turbine locomotive power—the Norfolk & Western (a big hauler of coal). The new engine is to be a turbo-electric, coal-eating giant designed to pull a heavy freight at 65 m.p.h.

• Joint Effort—Three companies will collaborate on the job. Baldwin Locomotive Works will erect the engine itself; Westinghouse Electric Corp. will supply the turbine; and Babcock & Wilcox Čo. the boiler.

This boiler will give the engine its hoped-for high efficiency. It will produce a steam pressure of 600 p.s.i. (about double that of the ordinary steam-locomotive boiler). Because of this high pressure, less steam—thus less fuel—will be needed to spin the Westinghouse-built turbine that drives the engine's electric generators.

• Odd Looking—When finished, the engine will look as though it had been built backwards. In 'the nose of the engine, ahead of the operators' cab, it will carry 20 tons of coal. A tender carrying 16,000 gal. of water will be behind the engine.



Du Pont "Cordura" yarn gives these products high strength at low cost

V-BELTS made with Du Pont Cordura* High Tenacity Rayon are stronger . . . have longer life. Because of their strength, "stretch" is virtually eliminated. There is less slip. You have fewer take-ups and less maintenance.

TIRES run cooler, resist excessive bruising and ruptures under the most punishing operating conditions when the carcass contains "Cordura." The thinner carcass made possible by strong "Cordura" cords not only contributes to better performance, but also reduces raw material costs.

CONVEYOR BELTS sinewed with "Cordura" are light in weight. They're easier to carry about, install and take down. And for long-lift, fixed installations, "Cordura" provides necessary extra tensile strength plus remarkable troughability and resilience.

HOSE reinforced with "Cordura" offers many advantages. Safety factors can be well-nigh doubled. Or hose weight can be reduced—sometimes as much as 50%. And "Cordura"-reinforced hose has greater flexibility, extra durability.

*REG. U. S. PAT. OFF.

Let us help YOU profit with "Cordura"

Inherently stronger than natural fibers commonly used, and usually more economical, "Cordura" is a yarn you can't afford to overlook. Perhaps the uses described above suggest still another application to you. Write us about it ... and tell us if you need data on the performance of this yarn under unusual operating conditions. We'll be glad to give you a detailed analysis of the application you have in mind, along with other helpful information. Write Rayon Div., E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.





INDUSTRIAL TAPE CORPORATION . NEW BRUNSWICK, N. J.

PRODUCTION BRIEFS

The new East coast refinery of the Texas Co., at Westville, N. J., goes into operation next month. The \$50-million plant has a daily capacity of 40,000 bbl. of diesel fuels and industrial heating oils.

Pollution of rivers and streams is prohibited by a new Ohio law. Fines run up to \$500 for each 30 days of violation. About 200 industries will be affected.

Peanut combine harvester, designed by the University of Georgia, is going through shake-down runs after three years of development. Two operators can harvest one acre of peanuts an hour.

A special products division at Westinghouse develops new products from the research to the commercial production stages. The division will carry on pilot-plant work on products and handle special military projects.

Jet target planes with remote control will be developed and built by Ryan Aeronautical Co. under a \$1-million Air Force contract. Model XQ-2 will pack the performance of fighter aircraft in half the size.

Flame-resistant chemical for cottons and rayon, according to du Pont: (1) does not affect the feel or strength of textiles: (2) resists washing and dry cleaning. It's made from titanium and antimony salts.

Eliminating rivets on brake assemblies is one virtue of a new B. F. Goodrich adhesive used to bond brake linings and shoes on Chevrolet cars and trucks. Another: increased life.

Prevention of accidents in coal mines is described by a new Bureau of Mines book edited for mine workers. Write to the Government Printing Office.

Iron-silicon-magnesium alloy, developed at the Naval Research Laboratory, produces a stronger, more ductile nodular iron (BW-Mar.5'49,p48) when added to gray iron for castings. The alloy cuts down the use of strategic metals like nickel and copper.

Tempering process at General Electric Co. heats a metal surface to 1,600F, cools it again in 5 sec. An electro magnet holds metal parts against an electronic heater. When the part reaches the right temperature, the magnet is switched off, and the part drops into a cooling bath of oil.



Any business of yours?

That's not an impertinent question. It's an important one!

Somewhere on the list at the right you may find something that is your business. If so, you've hit paydirt. Each and every product listed is today being processed profitably with Votator heat transfer apparatus—usually more profitably than ever before! Savings of more than one-half in use of floor space, with corresponding economies in other processing factors, are the rule rather than the exception.

If you process any of the products shown, or similar ones, call your secretary right now! Dictate that letter of inquiry to Girdler. It can put you on the road to the extra profits that lie in continuous processing.

VOTATOR DIVISION

THE GIROLER CORPORATION

LOUISVILLE 1, KENTUCKY

VOTATOR is a trade mark applying only to products of The Girdler Corporation.

FOOD PRODUCTS

PRODUCT

FUNCTION OF VOTATOR APPARATUS

Edible Starch

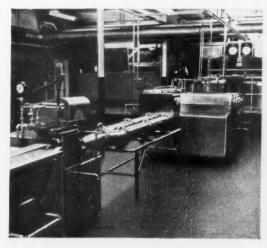
Eggs......Pasteurizing and/or Chilling
Fruit Juices, Purees.....Quick-freezing

INDUSTRIAL PRODUCTS

PRODUCT

FUNCTION OF VOTATOR APPARATUS

Industrial Starch Paste....Cooking and Cooling
Paper Cooting....Cooking and Cooling
Textile Size....Cooking and Cooling
Shaving Cream...Cooling and Plasticizing
Face Cream...Emulsification and Cooling
Gelatin & Glue...Chilling and Pelleting (prior to drying)
Lubricating Grease...Heating, Cooling, Jelling, and Homogenizing
Paraffin Wax...Crystallizing and Packaging
Photo Emulsion...Cooling and Jelling
Printing Ink...Heating and Cooling
Resins (fluid)....Cooling





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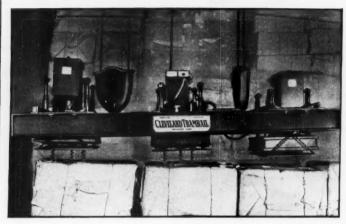
STRATFORD, CONNECTICUT
Makers at Ashcroli Gauges, Hancock Yalves, 'Consolidated Safety, and Relief Yalves, 'American' Industrial and Microsen Electrical Instruments, Builders of 'Show-Box Crones, 'Budgit' and 'Load Lifter' Hosts and other litting speciations,





see Clues Section on page 114

NEW PRODUCTS



Bale Grabber

A screw-type grab speeds up the handling of paper pulp and other baled materials in large warehouses.

The grab has three floating heads that pick up three bales at a time. Each head has a motor-driven auger that screws into a bale and holds it secure in transit. The floating feature of the pick-up heads allows the bales to be picked up when they re stacked unevenly. One bale can be 6 in. below another without interfering with the lifting action of the heads. A signal light on each head tells the crane operator when the augers are firmly in position.

Controls for the bale grabber are located in the operator's cab of the crane to which the grabber is attached.

The illustrated model will handle 1,500 lb. Equipment of greater capacities are built to order.

• Source: Cleveland Transrail Division, Cleveland Crane & Engineering Co., Wickliffe, Ohio.

· Availability: immediate.

Pressure-Line Purifier

A line purifier removes oil, water, and sediment from compressed-air and steam lines. The manufacturer recommends the unit for use on paint-spraying and sand-blasting apparatus. It will also remove moisture from steam used in processing foods.

The purifier looks like a section of pipe, and fits right into the line. As the air or steam enters the purifier it hits a cone-shaped nozzle that sets up a cyclone motion inside the pipe. Heavier water, oil, or sediment spins outward and collects on the inner wall of the purifier. As it falls to the bottom, a drain pipe carries it off. Heavy, coarse

sediment is removed through a vent

The unit is made of forged steel and fastens into a line with threaded connections. It can be installed in either a vertical or horizontal position.

The purifier is designed for use on steam lines up to 400 p.s.i. at 750F. Maximum pressure for compressed air is 800 p.s.i. at 100F.

Source: Centrifix Corp., 3029 Prospect Ave., Cleveland 15.

· Availability: immediate.

Home Power Tool

Supershop combines five power tools into one at less cost than comparable machines, according to the manufacturer. For wood- and metal-working, the unit can be used as a saw, drill press, lathe, sander, or grinder.

Crosscutting or ripping work is done with an 8 in. blade. The work table for the saw adjusts to any desired height or angle of tilt quickly and easily. The table also has a removeable center for dado cutting and moulding.

As a drill press, Supershop can be used vertically or horizontally. To fit work between the drill and work table, the drill itself moves to a height of 3 in. The chuck takes steel drills up to

The lathe has a distance of 30 in. between centers. A 10-in, swing over the bed gives enough clearance for work up to 20 in, in diameter. The tailstock that holds the work at the dead end of the lathe is fully adjustable.

The sander takes an 8-in, disc; the grinder, most popular sizes of grinding wheels.

A ½-hp, or ½-hp, motor, which comes extra, mounts on the unit to provide the power. Three adjustable pulleys



Artist - Ben Cunningham, native of Nevada

NEVADA—annual purchases: \$170 million—mostly packaged.

CONTAINER CORPORATION OF AMERICA



AT JOHN HANCOCK

Over the years there'll be many space changes made in the new John Hancock Mutual Life Insurance Co. Building, Boston, Mass. John Hancock will continue to grow and operational methods will change.

But in this beautiful structure, new floor layouts will be made quickly, easily and at lowest possible cost because Hauserman *Movable* Steel Interiors are used throughout 23 floors.



HAUSERMAN MOVABLE STEEL INTERIORS

Assure Low Maintenance Costs

These handsome walls won't chip, crack, warp or scale. They save thousands of dollars by eliminating the need for patching and repainting. Independent laboratory tests prove that Hauserman's baked-on finishes will withstand a washing every day for 1,000 years with commercial cleaning solvents.





HAUSERMAN MOVABLE STEEL INTERIORS Assure Excellent Sound Control

These solid, rigid interiors minimize sounds in two ways. Hauserman Movable Steel Walls keep out more inter-office noise than tile and plaster construction, yet are only half as thick. And Hauserman Acoustical Steel Pan Ceilings absorb approximately 85% of all the sounds that strike them.

there'll be some changes made

HAUSERMAN MOVABLE STEEL INTERIORS

Are Quickly and Easily Moved

Whenever new floor layouts will promote operational efficiencies, Hauserman Steel Walls are quickly moved . . . often after working hours. There's no muss or fuss and all units can be completely re-used.





HAUSERMAN MOVABLE STEEL INTERIORS Are Beautiful

There are many distinctive and authentic wood grain finishes for handsome executive suites. And there are 60 beautiful colors that range from natural hues through the pastels to match any decorating scheme. All of these finishes are baked-on to last a lifetime.

OTHER ADVANTAGES

Earlier Occupancy... all units arrive at your building completely finished and ready-to-install; there's no waiting for several coats of plaster and paint to dry. Incombustible Materials... all Hauserman materials are totally incombustible. Built-in Electrical Raceways... save on initial wiring costs and permit easy additions of enclosed wires and outlets. Unit Panel Construction... single units can be quickly removed and replaced for utility inspections and repairs.

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Branch Offices in Principal Cities — See Phone Book

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We assume undivided responsibility for complete interiors... shop drawings, building measurements and installation. We supply all praducts complete with hardware, wiring raceways and accessories. Our experienced erection crews are on call for alterations and additions. Our engineers are always at your service.



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ACOUSTICAL CEILINGS • COMPLETE ACCESSORIES

For every commercial, industrial and institutional need



Catalog to Help You Plan

You'll find Movable Steel Interiors to meet your exact requirements in our complete, 68-page Hauserman Catalog 49. Write for your copy today.



Why Trade Mark Service gets results

The 'yellow pages' of the telephone directories are used as a buying guide by 9 out of 10 shoppers. They supply buying information in a hurry...tell where to get a particular brand...give the names of dealers to select from.

National advertising in leading magazines (232,300,000 reader impressions in 1949) continually reminds the public how useful 'yellow pages' can be. Dealers, too, are told in their trade publications of the advantages of being identified with the advertised brands they sell.

Both campaigns mean greater value for national advertisers who display their trade-mark over a list of their dealers in the 'yellow pages.' That's Trade Mark Service. It's a service that pleases both dealers and customers... that gives *local pull* to *your* national advertising.



AMERICA'S BUYING GUIDE FOR OVER 60 YEARS

For further information, call your local telephone business office or see the latest issue of Standard Rate & Data.

give the desired power and speed variations. The whole works mounts on a +ft. plank with lag screws.

• Source: Power Tools, Inc., Beloit,

· Availability: immediate.



Fast Mail-Licker

A machine for sealing folded mailingpieces handles 7,200 items an hour. A pressure-sensitive cellophane tape does the job.

The sealer handles paper sizes up to 6 in. by 13 in., and as small as 3 in. by 3 in. The machine will take colored. transparent, or printed tapes, in roll sizes from 1 in. to 1 in. wide.

Running the machine is a one-man job. The operator controls a start-stop button, and keeps tape and mailing pieces on tap. The pieces are fed into the scaler automatically. When the paper supply runs out, the machine stops automatically.

The machine measures 14 x 22 x 29 in. Of all metal construction, it weighs 125 lb., but is portable enough not to require bolting down to a table.

The unit is powered by a 110-v., 60cycle motor.

Source: Minnesota Mining & Mfg. Co., 900 Fauquier St., St. Paul 6, Minn.

• Availability: three months.

Electrode Shaper

An air-powered cutting tool reshapes copper electrodes on spot-welding machines. You can do the job without removing the tips from the machine, the maker says.

The speed of the tool, combined with a correct angle of the cutter blade, enables the operator to trim electrodes five times faster than conventional trimming methods. The cutting head turns at 1,200 r.p.m.

Cutting blades are designed for use



FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

PRINCIPAL

CITIES



America's inventive genius has done much to eliminate household drudgery. Among the early contributions to better living was the invention of the kitchen range boiler by William B. Scaife, about 1870.

Today, Scaife range boilers, hot water tanks and other storage tanks perform an important service in the home.

The goal of Scaife engineering, research and product development is the production of pressure vessels that are notable for their dependable performance. Through extensive experience in a wide variety of applications, the Scaife organization has learned how to design and make tanks and cylinders for air, liquids and gases that are economical, reliable and best suited for the requirement.



on either dome- or tapered-type electrodes. Blades for other kinds of tips are made to special order.

The 3-lb. tool is equipped with needle and ball bearings for longer gear life and smoother performance. Alloy materials in the parts give toughness and durability.

The overall length of the tool is 10% in. The air-inlet pipe has a diameter of 1 in.

- Source: Aro Equipment Corp., Bryan, Ohio.
- Availability: immediate.



Calculator

An automatic calculator is streamlined in construction and appearance to cut down the fatigue and effort of the operator. The machine will speed up the handling of payrolls, inventories, and tax compilations, the maker says.

It has fully automatic multiplication, division, addition, and subtraction. An operator can write the answer to one problem while the next is being automatically computed.

When the operator is working lengthy division problems, an alignment device automatically centers the divisor under the dividend on the regis-

- Source: Friden Calculating Machine Co., San Leandro, Calif.
- · Availability: one week.

P. S.

Direct-reading thermometer has attached magnet that holds it to flat metal surfaces. Because the unit is instantly removable, it saves time over conventional thermometers which require a fitting. The maximum temperature of the unit is 1,000F. F.W.C. Dillon Co., 5410 W. Harrison St., Chicago 44, Ill., is the maker.

WHAT'S THIS?

A strong, safe catwalk made of WHEELING EXPANDED METAL

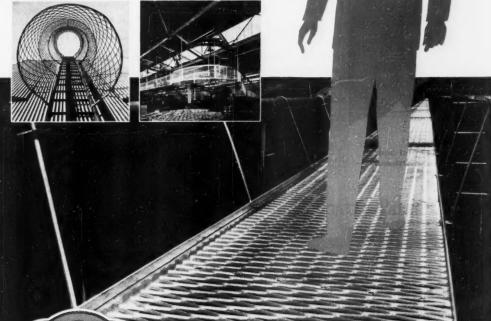
"Material of a thousand uses"

T'S a catwalk with safety "built in." The criss-cross, non-slip design of Wheeling Expanded Metal gives a sure grip to walks and platforms. The strength of this modern construction metal is another safety factor. Wheeling Expanded Metal is stronger than sheet metal of the same weight.

Use this versatile metal for machine guards, tool room enclosures, lockers, storage bins, sanitary shelving, drying racks and hundreds of other places where safety, cleanliness and ventilation count. Write us for information on the many weights and sizes available.

There's an added sense of security in a safety ladder guard using sturdy Wheeling ExM.

Wheeling ExM forms two sides and bottom of this inexpensive assembly line conveyor guard.



Wheeling

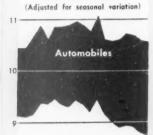
WHEELING CORRUGATING COMPANY WHEELING, WEST VIRGINIA

Atlanta · Boston · Buffale · Chicago · Cleveland · Columbus · Detroit · Kansas City
Louisville · Minneapolls · New Orleans · New York · Philadelphia · Richmond · St. Louis

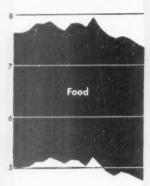
Where Consumers Spent Their Money

Billions of Dollars

Total Retail Sales



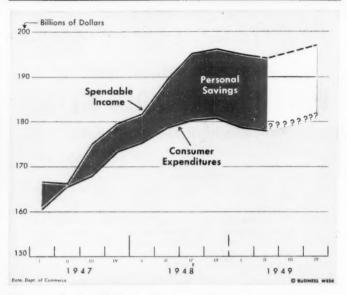
Other Durables



Apparel and
General Merchandise



MARKETING



Retail Sales: Rise Coming

Most merchants optimistic over the outlook for fall business. Uptrends in business, employment, and consumer income are favorable signs. Possible slump in auto sales would help other lines.

If incomes rise, can sales lag far behind? That's the question that U.S. retailers are asking themselves this week. With Labor Day come and gone, merchants are entering the peak autumn sales season.

That means that sales goals have to be set, buying plans made, inventory policies shaped. Questions that were postponed during the planning preliminaries of late summer cannot be ducked now.

Optimism—Many shrewd merchandisers are entering the fall season with a cheerful optimism. They expect to witness a couple of pleasant phenomena:

• An uptrend in total retail sales is in sight, after a long, gradual slide.

• Buying patterns will probably be reshuffled. That would mean that dollars which have been pouring into auto dealers' pockets would be channeled into other lines of trade. Naturally, the automobile sellers don't like to see this trend developing. But retailers of other types of merchandise are gleeful over the prospect.

• Bad Signs-There's not much in recent sales performance records to indicate that sales are headed for an upturn. For example, department stores last month suffered the biggest year-toyear drop in dollar volume since well before the war. August sales sagged 9% below August, 1948.

What has been even more disheartening to many retailers is this fact: The downtrend in consumer buying has continued during the last two months while industrial output has been on the

 Reasons for Hope—That would seem to make the situation look pretty black. But most retailers don't see it that way. Mainly, they are basing their optimism on the advice of their store economists. And these business oracles are deriving their cheery outlook from these facts:

(1) Consumer incomes are following industrial output along the recovery path for the second half of 1949;

(2) The rate of personal savings, which swelled in the second half of 1948 (thereby taking dollars out of trade channels), is now running at a fairly stable rate;

(3) Consumer dollars that have been drained off into increasing automobile

purchases are likely to shift back toward other lines of retailing.

ward other lines of retailing.

• Steady Rise—The uptrend in consumer incomes has already set in.

March, in fact, marked the low point, and each succeeding month has seen a slight increase. A continuation of the rise seems almost certain. Factory employment is picking up along with industrial output (BW—Sep. 3-49.pl9). And fourth-round wage boosts some time this autumn are taken for granted.

So spendable income (total after taxes) will expand by the year-end, possibly to a point as high as the 1948

peak.

· Effect of Savings-That, in itself, of course, doesn't guarantee that sales will rise, too. Merchants still harbor a few bitter memories of what happened last autumn. Incomes were rising steadily then, but sales didn't keep pace. Instead, consumers pocketed the money in the form of increased savings. Department-store men remember particularly how the plus signs in their sales figures suddenly turned into minuses right after Election Day. weather and late Christmas buying helped to turn the tide. But the lag was clear-cut; it started ahead of-and helped to cause-the slide in factory production.

But this year, there is good reason to think that the rate of personal saving will be stable. One reason: The savings rate has already been steady for about a year (chart, page 72). Another: The rate is just about normal, if you

judge by prewar experience.

• Explanation—Economists figure that this is what happened to the savings picture in 1947 and 1948: Savings dropped unusually low during the consumers' postwar rush to buy goods that had been unavailable during the war. But once the most urgent needs for many goods were met, the spending fever eased and consumers decided to refill their bank accounts.

Now, however, consumers' liquid savings are more comfortable. That means that consumers are in a better position to spend a larger portion of their current incomes, instead of put-

ting it into the bank.

• Buying Shift—What the harder-hit retailers mainly want to see is a shift in the buying trend. They know that, even if incomes go up and savings hold steady, the over-all rise in retail sales wil! not be too big. Estimates are that the increase won't be more than 2% above current levels on a seasonally adjusted basis.

That would still leave volume below last year. But coupled with shifts among retail lines, it could still spell a major boost to some kinds of trade.

As it is, total retail sales this year have held fairly steady (chart, page 72). Dollar volume has been off only about



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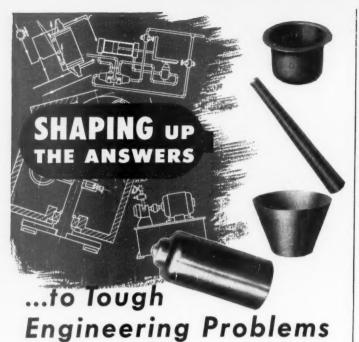
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555 Roosevelt Bidg., Los Angeles 14

CONTAINERS FOR LIQUIDS, GASES AND SOLIDS

2% from a year ago, even in recent months

But the figures for total retail sales tell only part of the story. Some lines of trade are running as much as 8% or 9% below last year's levels, instead of the 2% that retail sales are off as a whole. A big reason: Output and purchases of new automobiles have risen markedly during the past year. Another: Food sales, the biggest chunk of the total, have been running fairly steady.

Thus, expenditures for autos and food have siphoned off a lot of the money that other tradesmen would have liked to take in. And that has meant that their sales declines have been much greater than the average retail dip.

• In Reverse—The same reasoning, however, may mean that those lines may post autumn gains greater than the expected 2% average. Normal prewar seasonal trends are returning to the auto industry (BW—Jul.9'49,p54). Now that the peak driving season is over, purchases of new cars may shrink appreciably.

No major shift is in store for food. Easing meat prices, however, suggest a dip instead of a rise in food dollar

With food stable and automobile volume either steady or declining, there is going to be a good deal more money available to buy other types of merchandise.

• Who Will Gain—Just which retailing groups will benefit most from any spending upsurge or reshuffling can't be predicted exactly. The building-materials and home-furnishings groups, however, ought to be among the winners. They should profit from the large but delayed upswing in homebuilding this year.

Apparel and general-merchandise stores—including department stores—probably passed their low point during the summer. Perhaps even the restaurant and jewelry trades, which have suffered from a three-year-long downtrend, will exhibit some renewed strength.

NEW CENSUS SERVICE

The Commerce Dept. is going into market research in a big way next year.

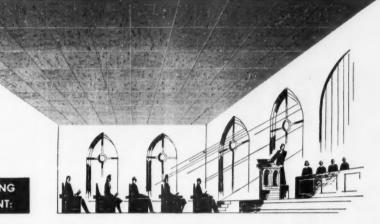
To meet long-felt needs of business and of public agencies, a new Population Estimates & Forecasts Unit has just been set up within the Census Bureau. Its principal tasks:

(1) To reinterpret existing data on the age and sex characteristics of the population.

(2) To improve the bureau's periodic estimates of population concentration and distribution by area.

(3) To break down population on a county-by-county basis.

Why Beautiful Acoustone is the recognized leader in Sound control













Your U.S.G. acoustical contractor will study your sound control problem, make recommendations. tirely without obligation. Write us for the name of the authorized contractor who serves your territory.

ACOUSTONE meets every requirement of the architect, interior designer and building inspector - because ACOUSTONE has all the features required in a modern sound control material.

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GLOBE-UNION INC., MILWAUKEE 1, WIS.

S P I N N I N G P O W E R



SPLIT-SECOND STARTING

No Control

Unless a manufacturer uses fair trade laws, he is unable to control retail prices, court rules in television case.

What legal power does a manufacturer have over the retail price of his merchandise if he doesn't fair-trade it?

The answer, according to a decision handed down last week by New York Supreme Court Justice Henry Clay Greenberg, seems to be: None.

• No Control—Under the fair-trade laws now in effect in 46 states, of course, a manufacturer can set the retail price of his product as high or low as he wants. Retailers are then bound to observe that price—or get into trouble. But if a manufacturer doesn't make use of those laws, said Justice Greenberg, he might as well give up trying to control retail prices.

Greenberg's dictum grew out of a feud between Allen B. DuMont Lab-



Tapping a Mass Market

Meter-Ad Corp. of America is developing a new advertising medium. It is installing these ads on parking meters throughout the U.S. Each ad measures $4\frac{1}{4} \times 7\frac{1}{4}$ in., is visible from both sides. Rates range between 51.00 and 52.00 per meter, per month, depending upon the number of meters contracted for by the advertiser. The municipality gets one-third of gross ad revenues monthly. Meter-Ad promotes its medium with the sales pitch that it taps a mass market near point of sale.

oratories and R. H. Macy & Co., New York department store (BW-Aug.13

'49,p56).

In July, DuMont franchised Macy's to handle its line of television receivers. Almost immediately, Macy's ran an advertisement cutting the prices on its line of 1949 DuMont TV sets.

 Protest—Then, according to Macy's, a group of DuMont dealers protested to DuMont (1) about Macy competition; and (2) about Macy's especially favorable inventory position.

The inventory hubbub resulted from this: DuMont's older dealers had ample supplies of 1949 models. Then DuMont cut wholesale prices to make way for 1950 sets. The older dealers, being stocked up, couldn't take much advantage of the cut. But Macy's, being a newcomer, could.

 Suit—So DuMont canceled the Macy franchise and asked the court for a temporary injunction to restrain Macy's

from:

(1) Advertising and selling DuMont sets at cut prices;

(2) Taking orders for sale and delivery of DuMont products;

(3) Buying DuMont TV sets from DuMont's dealers and distributors for resale;

(4) Advertising that Macy's would continue to have a broad selection of DuMont sets and that Macy's was a DuMont dealer.

• Turndown–Justice Greenberg denied all parts of the injunction except the one which forbade Macy's the right to advertise that it is an authorized DuMont dealer. His reasoning: "Plaintiff (DuMont) could easily have protected its position if it desired to do so by the simple process of price fixing the merchandise under the Fair Trade Act."

"It seems to this court," said Justice Greenberg, "that plaintiff is complaining not so much because of what it conceives to be the defendant's breach of contract, but because the price at which defendant is offering the television sets for sale is lower than plaintiff at the present time considers appropriate."

• More Cuts-Following the court's decision, Macy's again offered DuMont sets at cut prices; one discontinued model was offered at \$499, almost 50% off the original list price of \$955. And at the same time, Hearn's, another New York store, staged a similar sale.

• Moral—To marketing observers, the DuMont-Macy affair points up an old truism: Basically, manufacturers aren't great lovers of retail price-fixing; their prime object is to move goods and move them fast. It's the retailers who hate price-cutting competition. And when enough of them howl, the manufacturer finally gets dragged in to keep from losing his distributive setup.

When you need High Strength Steels CALL US!

Remember, when you use U·S·S Cor-Ten or U·S·S Man-Ten instead of carbon steel, your steel supply will go one-third farther. Our warehouses from coast-to-coast will do their best to supply your needs in any of these four High Strength Steels—"The steels that do more." Phone, wire or write the warehouse or sales office nearest you.

U-S-S COR-TEN

A steel that has a yield point 1½ times that of structural carbon steel . . . that has greater impact strength and abrasion resistance . . . and whose resistance to atmospheric corrosion is 4 to 6 times higher.

U-S-S MAN-TEN

A steel that has twice the atmospheric corrosion resistance of plain carbon steel. Tough...high strength...hardwearing and highly resistant to shock and vibration.

U-S-S ABRASION-RESISTING

Fills need for a low-cost, abrasionresistant steel. Costs little more than plain carbon steel. In certain applications wears as well-sometimes better —than higher priced alloys.

U-S-S MANGANESE-NICKEL-COPPER

Affords weight reduction through high strength, greater toughness and improved characteristics in applications involving cold forming, metal arc welding and moderately severe impacts in low temperature service.



SYMBOL OF SERVICE - FOR STEEL USERS

Fill in and mail the coupon NOW for free booklets on U·S·S High Strength Steels

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Without obligation on my part, please send free booklets on U.S.S High Strength Steel	28 8.
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Firm Name	
Address	٠
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UNITED STATES STEEL SUPPLY COMPANY



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CLEVELAND - LOS ANGELES - MILWAUKEE - MOUNE, ILL - NEWARK - PITTSBURGH
PORTLAND, ORE - SAN FRANCISCO - SEATTLE - ST. LOUIS - TWIN CITY (ST. PAUL)
Also Soles Offices on KANSAS CITY, MO. "PHILADELPHIA - TOLEDO -TULSA - YOUNGSTOWN
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Does the material you are now using cost too much for you to fabricate your product from it profitably? Then learn the advantages of using Permaclad, the ultra modern Stainless Clad Steel. Permaclad combines the surface characteristics of Stainless Steel with the forming qualities of Carbon Steel. It has excellent cold forming properties. Is readily polished to any desired luster. Shower stalls, deep freeze units and many other products are now being made of Permaclad. It will pay you to get full information about this corrosion resistant, cost saving steel now. Free literature on request. Alan Wood Steel Company, Conshohocken, Penna., Dept. P21.



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PERMACLAD STAINLESS CLAD STEEL A Product of

ALAN WOOD STEEL COMPANY

Super-Diamond Floor Plate - Billets - Plates - Sheets (Alloy and special grades)



HYDRO-COOLING of produce begins in the field. Corn is placed in wet burlap bags which are covered with ice to take out field heat. Then . . .



AT COOLING SHED, corn is machine-husked, inspected, trimmed, washed. An icewater bath drops its temperature to about 33F. This kind of . . .

Icing Cuts Vegetable Loss

Hydro-Coolers Assn., Food Machinery Co., prolong freshness, save vitamins and flavor by keeping produce cool during entire trip between farm and consumer. Higher cost is offset by sales.

Produce growers in at least three farm areas are literally putting the freeze on a hot marketing problem—losses from spoilage by heat. Vegetable spoilage means a profit loss for someone along the distribution network. Either the grower, distributor, or retail grocer is stuck if the produce spoils at the time he has it.

At the retail level, for example, spoilage of fresh produce runs between 5% and 6% daily. Some stores have as much as 15% spoilage.

 Moist and Cold—Now, however, two separate organizations—the Hydro-Coolers Assn., Minneapolis, and the Food Machinery Co., San Jose, Calif.—say they have a way to keep everyone from getting caught. The solution: Keep the produce moist and packed in ice from the time it's harvested to the moment its wrapped for the consumer in the neighborhood grocery. The idea of icing is not new, but this appears to be the first time it has been put on a mass-production technique.

While both the Hydro-Coolers Assn. and Food Machinery's solution is the same, their methods of application differ. The association is composed of 32

Selectomatic Elevators



"THINK" FASTER THAN A TRAFFIC PROBLEM CAN GROW

Tucked in the Electronic cells of Selectomatic's ingenious Electrical Brain are the pre-set answers to any elevator traffic problem your tenants may present. For instance—during the Off Peak period (9:30 to 4:30) in a typical office building, this advance electrical knowledge works elevator wonders. Set just one

your Off Peak problems for the entire day and is ready to calculate correct answers -instantly and automatically. Tenants can go out for coffee, lunch or cokes in trickles or torrents... visitors can enter your building single file or by platoons . . . traffic can make a quick switch from light lulls to sudden surges in either direction . . . Selectomatic's Electrical Brain automatically reacts to the strongest demands and slightest whims with the most efficient passenger service possible to or from any floor at any time. Selectomatic is the exclusive development that makes Westinghouse Elevators superior to any other brand of vertical transportation. Send for Book B-3597 you'll enjoy, and profit by, reading its complete, fabulous story.

Westinghouse Electric Corporation, Elevator Division, Dept. A. Jersey City, N. J.

YOU CAN BE SURE ... IF IT'S Westinghouse

CHECK ... AND YOU'LL SELECT

Selectomatic Eleva



Advertising to Midwest farmers at the local level does a threefold selling job: (1) it acquaints the farmer with your services and products; (2) it encourages present dealers to push your products; (3) it helps line up new dealers.

The dealer prefers the local farm paper because it's the medium most thoroughly read by his customers and prospects. The farmer prefers his local farm paper because it talks his language, knows his business, his problems. Each Midwest Farm Paper is locally edited for the farmers in its own area, has top farmer readership, complete farmer confidence.

Distribution may be national but selling is always local. Concentrate your advertising where most sales can be made. Buying the "Unit" gives rate savings up to 15%. All you need is a single insertion order, a single plate.

AIDWEST

Facenc Paper Unit

Nebra WALLACES FARMER and IOWA HOMESTEAD - PRAIRIE

THE FARMER • WALLACES FARMER and IOWA HOMESTEAD - PRAIRIE

THE FARMER • WALLACES' FARMER and IOWA HOMESTRAD • PRAIRIE FARMER • WISCONSIN AGRICULTURIST and FARMER • NEBRASKA FARMER Midwest offices at: 250 Park Ave., New York • 59 E. Madison St., Chicago • 542 New Center Building, Detroit • Russ Building, San Francisco • 645 S. Flower, Los Angeles

growers in the Minneapolis farm area. Each member processes his own produce before sending it to market. Food Machinery, on the other hand, provides the equipment for icing, then handles the produce for wholesalers in California and Florida.

Either method of handling the operation pays off in three ways: (1) It keeps heat-caused spoilage to a minimum; (2) vegetables reach the retail market with a higher flavor and nutritional content plus their natural eye appeal; and (3) it brings increased sales at premium prices all along the line.

at premium prices all along the line.

• Growing Interest—Apparently the simplicity of the idea and its potential dollar value makes sense to other produce marketers throughout the country. This week they are watching the iong system of marketing produce with more than a passing interest.

How It Works—Using corn as an example, here's how the icing method operates as set up under the Hydro-Cool-

ers Assn:

Tests show that iced corn, for example, loses only 3.5% of its flavor (sugar content) in 24 hours compared to a 50% loss under present methods employed in other farming regions.

As the corn is picked, the ears are placed in wet burlap bags. These are loaded on a truck, given a cold-water shower, covered with a layer of chipped ice. At the grower's cooling shed, the corn is machine-husked, inspected, trimmed, and washed. Its temperature is dropped to around 35F by immersing it in tanks of ice water. The cooled corn is then sorted, handwrapped in cellophane.

• Wholesale, Retail—Then it's packed in bushel baskets, cradled in and covered with ice. Insulated trucks haul the baskets off to the wholesale market.

Grocers display the corn on specially



CELLOPHANE-WRAPPED ears of corn are packed in ice, moved to wholesaler

City "X-2" needs you to complete the picture!



City "X-2" is a thriving, friendly, busy city that's tailor-made for a second Packard dealer. And here's what it offers him:

A prosperous growing market: City "X-2" is one of the nation's most important industrial centers. It has more than 900 industries producing more than 1,200 different products. Population of the city proper is 427,500. Retail sales are near the \$600,000,000 level.

A ready-made group of customers: Hundreds of loyal Packard owners are immediate customers for service. What's more they're pre-sold prospects for new Packard cars.

Pleasant family living: City "X-2" is the capital, and largest city, of a famous midwestern state. A pleasant climate and an elaborate system of parks combine to make City "X-2" a sportsminded, outdoors-loving city.

City "X-2" is one of a select group of cities on the new Packard Golden Opportunity list. They're going fast—so act quickly!

- Sell the new Golden Anniversary Packard line—three series, 14 individual models, at new lower prices!
- Qualify for the industry's first three-year dealer contract!

 Share in the future of America's oldest exclusive fine car builder—a Company which today is in the best sales and production position of its entire 50-year history!

Wire or telephone direct to Karl M. Greiner, General Sales Manager, Packard Motor Car Company, 1580 East Grand Blvd., Detroit 32, Mich. (All inquiries are confidential.)



NEW LOWER PACKARD PRICES begin at

1 2224

*for the 135-HP Packard Eight Club Sedan—delivered in Detroit; state and local taxes, if any, and white sidewalls (\$21), extra.

Packard

ASK THE MAN WHO OWNS ONE



The letterhead paper you'll find in offices where decisions count!

Where modern merehandising ideas are put to work to speed the flow of goods to America's buying millions... there you'll find Cockletone Bond. Today, more and more leaders in this vital American business are choosing this letterhead paper. They prefer it because its tough sturdy feel, lively crackle and beautiful shade of white lend added dignity to business messages. Why not investigate the advantages of appointing this finer letterhead paper as your business representative? The moderate cost of Cockletone Bond will surprise you.

THE FINEST LETTERHEAD PAPER EVER PRODUCED BY HAMMERMILL CRAFTSMEN



For the name of a member of the Hammermill Guild of Printers, ready and willing to supply your printing needs on Hammermill Papers, call Western Union by number and ask for "Operator 25."

SEND COUPON NOW...for Cockletone Bond sample book and portfolio containing printed specimens of good modern letterhead design, which you'll find useful in improving your own letterhead.

Hammermill Paper Company 1455 East Lake Road, Erie, Pennsylvania



Position_

(Please attach to, or write on, your business letterhead)

BW-9-10

LOOK FOR THE Cockletone WATERMARK



ICED RETAIL DISPLAY offers consumer fresh corn with 97.5% of its original flavor

iced racks which are covered with an insulated blanket overnight. This not only keeps the corn fresh, but it also cuts spoilage usually caused by handling when the grocer moves the produce into the store's refrigerator for overnight storage. It also does away with the need to rebuild the display each morning.

The icing system is said to effect savings in both the stocks of produce and their vitamin content.

 Quality—Celery, for example, may keep for a day at the customary 60 degrees; if iced it stays fresh for five days.
 Spinach, at 60 degrees, lasts one day, but keeps for nine days when iced.

Savings in vitamin content are also impressive. Asparagus loses 40% of its vitamin C in 24 hours in normal temperatures, but only 14% when iced. Spinach loses 31% normally, 9% when iced.

• Costs—The icing system of marketing vegetables results in higher costs all along the line, with the consumer paying the most at the retail level. Nevertheless, produce sales have jumped in the Minneapolis area. That indicates that the consumer is willing to pay premium prices for more attractive, fresher, and tastier produce.

On radishes, beefs, and carrots icing boosts the growers' costs an average of 7e a bushel. Corn runs about 11e higher. But the hydro-cooled produce brings him premiums of about 50e to 75e a bushel.

• Sales Outlook—The Hydro-Coolers Assn. expects to triple its sales volume by next year. It also hopes to boost its membership. There are no particular eligibility rules; but once admitted to the association a grower must stick to rigid standards.

"...to find the truth and apply it..."



"To find the truth and apply it . . ." was the lifelong objective of Henry Kreisinger, in whose honor the new Combustion laboratory, pictured above, has been named. An immigrant to this country at the age of fifteen, his story exemplifies the traditional opportunity America affords not only to her native citizens but to her adopted sons as well. Beginning as an apprentice in a machine shop in 1891, he had accumulated enough money by 1900 to begin his college career. By 1913 he had risen to the position of Supervising Engineer in the Fuel Section of the Bureau of Mines. Seven years later he left the Bureau of Mines to engage in research work for Combustion, Long prior to his death in 1946, his work had brought him international recognition as a leading authority in the field of fuel burning and steam generation.

His vision widened the horizons not only of his

own organization, but of the whole power field. His pioneering work in the field of pulverized coal firing and water-cooled furnace walls was an outstanding achievement that initiated the widespread use of pulverized coal in power stations throughout the world. This work was recognized in 1943 by his selection for the Percy Nicholls award, a joint award of the American Society of Mechanical Engineers and the American Institute of Mining Engineers for "notable scientific or industrial achievement in the field of solid fuels."

Combustion's long-range research and development program, under the direction of Mr. Kreisinger, contributed importantly to the advanced engineering features characteristic of the complete C-E line of steam generating, fuel burning and related equipment. And because today's experiment may well be tomorrow's standard practice, Combustion is constantly exploring new frontiers at its laboratories where the successors to Mr. Kreisinger devote their talents to carrying on his objective "To find the truth and apply it."

COMBUSTION ENGINEERING-SUPERHEATER, INC.

A Merger of Combustion Engineering Company, Inc. and The Superheater Company

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Everyone associated with any phase of the chemical industries will benefit by attending the

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Management International Exposition Co.



One economy: almost unbelievable disc savings . . . thanks to SoundEraser, exclusive disc resurfacer. Read what a few of hundreds of enthusiastic users say:

J.C. Penney Co., New York: "After reprocessing a 6 months supply of discs we saved more than 50% of our usual cost!" Bussmann Mfg. Co., St. Louis: "SoundEraser reduced our disc costs from 25c to 33½ an hour!" Transport Underwriters Asan., Los Angeles: "We saved \$125.36 on 2,156 discs! And the reprocessed discs are as efficient as ever!" Radio Reports, Inc., New York: "We use several hundred discs daily, and find that SoundEraser has slashed our cost about 80%!"

For more proof that SoundEraser is 'tops' for economy and efficiency, write today to: SoundScriber Corp., New Haven 4, Conn.

JOUND CRIBER

First All Electronic Dictating System
First Disc Dictating Equipment
230 Soles and Service Centers Coast to Coast

MARKETING BRIEFS

Giveaway radio shows are defended in a suit filed in federal court against FCC by the American Broadcasting Co. ABC says FCC was without jurisdiction to ban radio and TV giveaway shows (BW-Aug.27'49,p31) under Section 1304 of Criminal Code, pertaining to lotteries.

Detroit dry cleaners cut prices 10¢ last spring in an effort to boost business. But that didn't do the trick, so now prices are back where they were.

National distribution of steel doors and frames through dealerships is being developed by United Steel Fabricators. The Wooster (Ohio) company has been selling direct to major building projects.

Two major sales divisions—East and West—replace Diamond Match's former domestic setup of three divisions. Diamond found that it needed a tighter sales organization.

A new sales department has been set up to handle Procter & Gamble's processing and finishing products in bulk for the textile industry. P&G says the new department will place the company's research findings at the disposal of textile manufacturers.

U. S. cigarette makers produced a record 390-billion fags in the fiscal year ended June 30. This, says Agriculture Dept., is 3% (or 11-billion) more than last year. Estimated output for the 1949 calendar year: 395-billion.

Bulk packaging has made it possible for Eastman Kodak to cut 3% to 5% off the prices of its black and white sheet film, 8% off the price of Ektachrome.

Rexall Drug will stock its 476 retail stores with Nymer Neal candies starting Jan. 1. The low-priced line will be made by Candy Artists, a subsidiary of Blum's, San Francisco candy manufacturer. Rexall recently purchased 175,000 shares of Blum's common stock.

Frozen-food sales in 1949 are expected to top \$575-million. Of this, about \$75-million will be in orange- and grape-juice concentrates. Last year's sales hit \$370-million, of which orange juice accounted for \$18-million.

Who Drank How Much of What

The tippling habits of the U.S. consumer have changed considerably in the last decade. That's apparent from an analysis of last year's distilled spirits consumption released this week by the trade magazine, Liquor Store & Dispenser.

The U.S. soaked up some 28-million gal. more liquor last year than it did in 1940. Whisky gained most in popularity: its 32-million gal. gain helped offset the

4.7-million gal. consumption dip felt by gin, rum, brandy, and other hard liquors.

By states, New York drank up the lion's share—12.6% of the U.S. total. California, with 9.5% of the total, ran second. The survey also turned up some interesting facts about regional preferences. For example, one-quarter of all the Scotch whisky drunk in the U.S. goes down the gullets of New Yorkers and their visitors.

	(Wine Gallons)	U.S. Total	(Wine Gallons)	U. S. Total
Whisky				
Blends with neutral spirits	45,200,000	31.3%	121,920,998	70.6%
Bottled-in-bond	13,000,000	9.0	8,270,512	4.8
Straights and blends of straights	53,200,000	36.8	10,106,825	5.9
Scotch	6,600,000	4.5	7.314.733	4.2
Canadian	2,300,000	1.6	4.356.393	2.5
Other	100,000	0.1	1,229,691	0.7
Total whisky	120,400,000	83.3	153,209,152	88.7
Other distilled spirits				
Gin	13,400,000	9.3	10,088,514	5.8
Rum	3,600,000	2.5	2,168,860	1.3
Brandy	2,800,000	1.9	2.185,943	1.3
Cordials and liqueurs	4,300,000	3.0	4,358,142	2.5
Miscellaneous	Nil	0.0	697,007	0.4
Total distilled spirits	144,500,000	100.0	172,707,618	100.0

Estimates for 1940 based on data of the Distilled Spirits Institute, National Assn. of Alcoholic Beverage Importers, Inc., and Alcohol Tax Unit. Burean of International Revenue.



11 out of 12

WINDOW BOX PRIZE WINNERS

in the 1949 folding paper box competition have LUMARITH* transparent film windows





Every day more and more manufacturers are finding that Lumarith Transparent film windows sell more merchandise.

CELANESE CORPORATION OF AMERICA-Plastics Division, Transparent Films Dept. 29-1, 180 Madison Avenue, New York 16, N. Y.

LUMARITH* TRANSPARENT FILM

Celanese

Reg. U. S. Pat. Off.

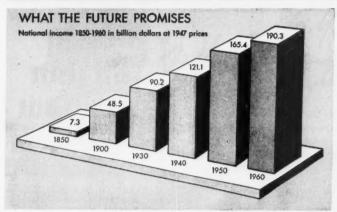
PLASTIC



Honeywell Advanced Instrumentation

AND CONTROL BROWN

MANAGEMENT



© Twentieth Century Fund
In 1960 national income will be \$190-billion annually, estimates Twentieth Century Fund

'Measure of a Nation'

Twentieth Century Fund booklet distills and simplifies weighty 1947 report on 'America's Needs and Resources,' puts it in a form management is finding useful for employee education.

Two years ago the Twentieth Century Fund published a ponderous, comprehensive, 875-page report titled "America's Needs and Resources" (BW-Apr.26'47,p55). It projected a detailed preview of what U.S. economic life could be in the decade 1950-1960—barring a third world war. Management men, economists, and labor leaders who read it found a wealth of statistical material to help them plan for the future.

• Short Version—This week a new version of the same report was coming in for even wider recognition. Management men and general readers by the thousands were snapping up a little 100-page booklet called "U.S.A., Measure of a Nation." In it, authors Thomas R. Carskadon (of the Fund who did the text) and Rudolf Modley (who did the visual matter) have distilled and simplified the information of the original report, and brought it to life with simple, graspable charts.

to life with simple, graspable charts. To give the booklet the widest possible circulation (it sells for \$1.00), the Twentieth Century Fund turned it over to Macmillan Co. Macmillan says its reception has been "extraordinary." It has already sold out a first printing of 20,000 copies, and a second printing of 15,000 is disappearing rapidly.

 Management Use—Not a few big companies have put in orders for the booklet in large quantities. Most of them are distributing it internally to upper-echelon employees, as one executive put it: "to stimulate their thinking about the future." The C.I.O. Textile Workers Union (which says it doesn't necessarily "go along with all the book's premises") has ordered a number of copies for distribution to its staff workers.

• Projection—Basically, as the original report did, the booklet outlines the progress America has made in the last century, in terms of production, employment, output, and goods. Then it projects, by charts and graphs, what can be expected for 1950-1960. The authors are careful to point out that these are not predictions, just what the U.S. is capable of "if we operate our economic system at high levels such as prevailed during the last half of the 1920's."

We can expect, the authors say, an economy in 1960 which will be producing a great deal more than it ever did before the war. What their text does not always make clear is that the level of output projected for 1960 is little higher than today's. Conservatively, the original Twentieth Century Fund study assumed that the postwar boom is abnormal, reached its conclusions by projecting prewar trends.

The secret of America's progress, the book says, is productivity. And the key to productivity is machines. The



HELP relieve Telephone Tie-ups instantly with Executone Inter-communication!

"INSIDE" PHONE CALLS cause switchboard snarls! They delay important calls from customers—make expensive "call-backs" necessary — keep everybody waiting for lines.

But the instant you install Executone, you eliminate "inside" phone calls . . . release trunk lines . . . improve switchboard service!



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Two stations cost as little as \$61.
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I	1	☐ New booklet "How to Solve
1	1	Communication Problems."
	1	NAME
	1	FIRM
I	i	ADDRESSCITY
I		

BUSINESS IN MOTION

To our Colleagues in American Business ...

In coal mining air is sometimes used instead of explosives. A perforated steel cylinder is inserted in a hole drilled in the coal seam, and air at a pressure of 10,000 pounds per square inch is suddenly released into the cylinder. The explosive force of this high-pressure air is sufficient to disrupt the coal, and do it safely. Air shooting can be used in the same area where men are at work, so that it is unnecessary to stop operations

in a large section when shooting.

The air is compressed above ground, and is led to the underground working face through steel pipe. There has to be a flexible connection between the end of the steel main and the perforated

cylinder, for ease in handling, and to take the recoil when the pressure lets go. The connection is a copper tube whose specifications are quite different from those of the Revere tube used in such applications as radiant panel heating, refrigeration, plumbing. This tube for the coal mine is special tube indeed, for it is .375 inch in diameter, with a wall .120 inch thick. Thus the inside diameter is less than a third of the outside diameter. When we received the first inquiry for

such tube our curiosity was aroused; the proportions seemed strange until we learned that a pressure of 10,000 pounds per square inch had to be withstood. Then we realized that we had before us another example of the fact that copper is an amazingly versatile metal.

Copper is believed to be man's oldest metal, but Revere likes to consider it as "the metal of invention," because it has such a large variety of admirable

qualities that there seems to be no end to its uses. New ones keep coming up. However, there are other good materials too, such as steel, used in this case for the mains between compressor and coal face. The important thing is to use the

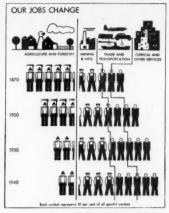
best material in view of all the circumstances involved in fabrication and use. Producers of raw and semi-manufactured products know a great deal about them and are delighted to put their knowledge at the disposal of prospects and customers. Revere suggests that now is a good time to review specifications with suppliers; some advantageous new uses may be found for old materials in new forms, or new materials may offer improvements in old applications.



REVERE COPPER AND BRASS INCORPORATED
Founded by Paul Revere in 1801

女女女女

Executive Offices: 230 Park Avenue, New York 17, N. Y.



O Twentieth Century Fund

WORKERS' SHIFT to city is shown by fact that in 1870 half labor force was in farming, but in 1940 only one-fifth was

authors then assume that "we shall retain and continue to improve our machines. This gives us a reasonable chance to keep on increasing our output, to provide more goods, more services, more leisure—adding up to a better living standard—for the average American."

• Per Hour—In the last 100 years, by the increasing use of machines, the average worker has stepped up his output considerably. In 1850, his hour's work would have brought him 27¢ worth of goods; in 1940, it brought \$1.15 worth. By 1960, if productivity keeps climbing, his hour's work should bring him \$1.61 worth of goods.

• Needs-Just what will the U.S. of 1960, with a population of 155;million, need in the way of food, shelter, clothing, education, transportation, recreation? Point by point, the authors take each up and translate the needs into terms of dollars. When all the facts and figures have been mustered and projected the authors come up with these "capabilities" for 1960. All dollar figures are in terms of 1947 purchasing power (in terms of current dollars the figures would be some 8% higher):

Food: In 1940, the nation's food bill came to \$16.4-billion. But if every American had gotten the diet he should have, this figure would have been nearer \$17.5-billion. If every American gets the diet he should have in 1960, spending for food will be nearly \$41-billion. But the actual expenditure estimated is nearer \$36.3-billion.

Clothing: The estimated clothing bill for the U.S. in 1960, if people still spend about 14% of their income on clothing, will be about \$22.1-billion. But this figure doesn't mean that every-



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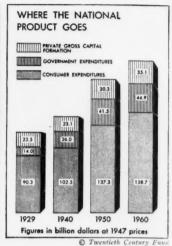
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C Twentiern Century Funa

CONSUMER SPENDING accounts for biggest share of national product, with government expenses and capital equipment expenditures following

one will be adequately clothed. To give everyone what the authors set up as a standard wardrobe, the clothing bill will have to be nearly \$1-billion higher.

Housing: To put a decent roof over the head of every American, a total of some \$134-billion will have to be spent by 1960 on housing projects. The authors estimate that it would cost an extra \$77.5-billion to get rid of all city slums and blighted areas.

All in all, consumer spending by 1960 could conceivably be chugging along at the rate of \$159-billion a year. The average household income may average nearly \$4,000-compared to \$2,800 in 1940 (again, in terms of 1947 dollars).

• Capital Spending—The outlook for capital spending, according to authors Carskadon and Modley, is quite similar. If spending is carried on at the same rate of increase as in the past, \$39-billion will go into capital goods in 1960. But to achieve "decent minimum standards of goods and services for every living American," spending for capital goods would have to be closer to \$45-billion.

In all the authors' projected figures, it is the difference between the "actual estimate" and the "capable of" estimate that's significant. For the difference is between an economy in which some people still won't have adequate food, clothing, and housing—and one in which all will have enough.

But how? That the authors do not say. For as a final footnote they add: "We offer no formula, no advice on political or economic policies to bring this production about."



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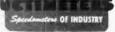
Measured by man-days available, business in New York State has lost less time through strikes over the past five years than in any of the other ten leading industrial states. For the whole story, write: New York State Department of Commerce, Room 171, 112 State Street, Albany 7, New York.





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Small-Business Statistics

Punch-card equipment now makes it possible to get them in a hurry-on nearly any phase of the business operation. Latest venture into field is by Accounting Corp. of America, in San Diego.

With most small businessmen, statistics on their own operation and their industry are a matter of guesswork or of rule-of-thumb calculation. At best, the range of statistical analyses available to them is narrow.

· New Services-Today, thanks to the flexibility of punch-card machines, the corner merchant can have access to the same kinds of information that

big business requires.

Business analysis services using such methods have been blossoming since the war. The latest is being offered by Accounting Corp. of America of San Diego, Calif. Its new statistical service is a byproduct of the firm's national bookkeeping-by-mail service known as Mail-Me-Monday. So far, the service is available only to the 6,000 clients of Mail-Me-Monday served by franchise holders in some 200 cities. But banks and government agencies have shown lively interest. This week A.C.A. is thinking about selling its statistical service to outsiders as still another byproduct.

· Current Facts-Proper ratio of wages, rent, advertising, and other expenses to gross sales is likely to be a mystery to the smaller merchant. What operation-ratio statistics he can get are often around two years old-which doesn't help much in these fast-moving times. With the Accounting Corp. system, a gasoline station owner, a lunchstand operator, a druggist, or one of a number of other such businesses can get the

facts almost currently.

That answers the small business-man's question: "How am I doing?" At the same time it helps his banker and suppliers to get the answer, too. An apparel store, for instance, can see how its markup compares with others in the same business. And it can spot trouble by seeing which of its expenses are out of line.

· How It Works-Mail-Me-Monday's franchise representatives around the country marshal the facts from each client in the area and send this data to the San Diego headquarters. There the information is reduced to holes in punch cards. These run through a battery of I.B.M. bookkeeping machines to prepare the client's monthly statement.

The operating ratios are prepared

by types of business and grouped according to annual gross sales. The regions of the country also are classified

and compared with national averages. · Comparisons-The monthly statement shows in parallel columns the client's own operating statistics and those of his industry or his region. General interest in these figures—which have only a month's lag-is so great that A.C.A. officials are beginning to wonder whether the tail won't soon be wagging the dog.

The robot statisticians have figured out some interesting things in their mechanical brains. Virtually all small business owners, the business machines declare, are responding to competition by taking a smaller markup. But they are managing to keep a net profit on each dollar's worth sold that is only slightly down from 1948. They do it by selling harder and by hammering at

expenses other than wages. · Profit and Dollar-The corner druggist probably is making a larger profit percentagewise on gross sales today than he made a year ago. That doesn't mean that he is putting more dollars into his pocket this year, because his dollar volume may be down. But the national average net profit for drug-stores doing an annual volume of less than \$200,000 was 9.25% last year and is running at 10.79% this year.

Drugstores, however, are bucking the trend. Liquor store profits have dropped from 12.8% to 10.07%; food stores from 7.15% to 5.42%; cocktail lounges from 14.19% to 9.98%; restaurants from 9.53% to 7.21%; and service stations from 9.6% to 7.17%

· Cutting Expenses-The statistics also show that most controllable expenses are being cut right down the line. Big exception is advertising, which has been increased in varying amounts right across the board. (Firms which do not advertise are not included in statistical summary figures on that operating ratio.)

Rent and most other items of fixed expense are running higher on the average than last year. But individual cases show a growing tendency on the part of the business owner to talk to his landlord about lower rent.

• Special Figures-The insight into small business which can be obtained is by no means confined to operating ratio statistics. Punch cards can be sorted in almost countless ways and run through the automatic machines to produce data on any phase of business that a cross-sampling of company books would show.

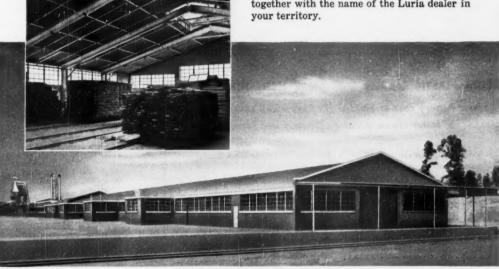
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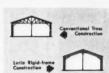
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READERS REPORT:

Manila's Rubble

Sirs

I was quite surprised on viewing the picture taken of a "typical war-battered house" in Manila during the Japanese occupation [BW—Aug.6'49,p88]. I am enclosing three views of the same house taken when I was stationed there from July to December, 1945.

The house was located on a busy intersection of several streets. (I can remember only Santa Mesa. A few blocks away was the Malacanan Palace. The Pasig River was nearby. The house, at one time, must have been very lavishly decorated as some of the teak hardwood flooring, beautiful stained glass and tile were still in evidence when I was there.

The upper floor of the house was used as living quarters for the personnel of the 938th and 951 QM Petroleum Products Laboratory Companies as well as a small detachment from the Base Headquarters Company. The lower floor was first used for an employment office by the Army. Later, our laboratory was moved from the gasoline station across the street and also set up in the lower floor of the house.

Near the end of 1945, our outfit was ordered to move to South Manila near Nielsen Field. Rumor was reported that a construction company was to use the building. I do remember seeing trucks, diggers and similar equipment around the building at a later date.

The house may still appear as a part of a pile of rubble in my picture, but after two years in New Guinea, it was a luxury!

FRANK E. CASKEY

CROWN ZELLERBACH CORP., CAMAS, WASH.

Industrial Psychiatry

Sirs:

In reading your article on "Psychiatrists in Industry" (BW—Jul.30'49, p25) I was particularly pleased with your conclusion that psychiatry has gained a strong foothold in industry and proved its value.

It should be of interest that the School of Industrial and Labor Relations at Cornell University has a program for the training of industrial psychiatrists consisting of two-year fellowships made available by a grant from the Carnegie Corporation.

TEMPLE BURLING, M.D. PROFESSOR IN INDUSTRIAL & LABOR RELATIONS CORNELL UNIVERSITY, ITHACA, N. Y.



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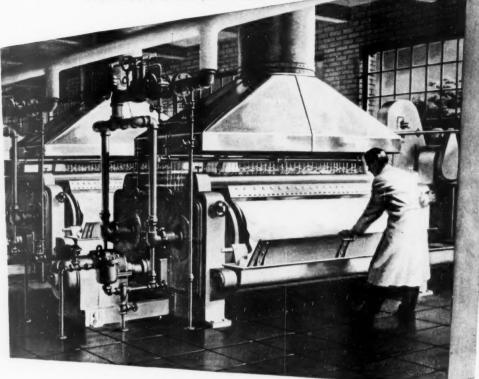
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FINANCE

Colleges Turn to Industry

About 40% of their endowments have been channeled into business and real estate. Soaring costs, poor returns from mortgages and bonds have forced break from traditional investments.

Colleges today are a long way from being just dealers in higher education.

In the last few years the schools have come to look more and more like corporate holding companies. Some 40% of endowments are now directly invested in businesses or real estate. Much of the college news now belongs more on the business-financial pages than in the educational columns.

• Dollar Crisis—What caused the jump from classroom to commerce? The main thing was the schools' own brand of postwar dollar shortage. To make ends meet, universities, either as owners or as sole beneficiaries, have taken over the operation of a wide range of businesses. These run all the way from airports and bus lines to piston-ring plants (BW–Jan.26'46,p76). Schools also operate fruit and walnut groves, farms, cattle ranches and creameries, printing plants, laboratories, office buildings, and apartments.

Another, even more important off-

campus excursion has been the real estate sell-lease deal (BW-Apr.17'48, p96). Except for life insurance companies, schools are probably the largest owners-lessors of retail stores.

• Charge and Retort—All this extracurricula trading has stirred up plenty of criticism. One particular sore spot for industry is that college-owned, or operated, businesses don't have to pay the 38% federal tax on corporate earnings. Their profits are for educational purposes, thus are exempt.

The schools' stock answer to critics is that they aren't running assembly lines because they want to. They say it's the only way they can keep their doors open. Wages and maintenance costs have soared since the war. And record-breaking enrollments have meant staff and plant expansions. Tuitions and endowment incomes just aren't big enough to meet the bills.

• All Sizes—The dollar-squeeze has pinched the big schools just as much



Louis Ruthenburg

Servel Realigns Top Command

Louis Ruthenburg last week stepped into a newly created job as chairman and chief executive officer of Servel, Inc. W. Paul Jones moved in as president and general manager. Ruthenburg, 61, has been president of the refrigerator company since 1934. Jones, who is 47, is resigning as vice-president of Philco Corp. where he bossed the refrigerator division. Jones was with Servel before, from 1929 to 1933.

W. Paul Jones



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And . . . when the script called for the repeated use of a dictating machine, Paramount made another perfect selection in the amazing Dictaphone TIME-MASTER!

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DICTAPHONE Electronic Dictation

Only Dictaphone Corporation makes Dictaphone Machines, (*Reg. U., S. Pat. Off.) as the little ones. Columbia saw its operating income in fiscal 1947-48 fall 51-million short of covering costs. This year's report will probably show a 50% larger deficit. The University of Chicago lost \$1.5-million in 1948-49. Yale fell about \$700,000 short; next year Eli looks for something like a \$1-million to \$1.6-million deficit.

• What Happened—Ordinarily, colleges have two main sources of income: (1) tuition fees; and (2) income from endowment funds, plus gifts. It used to be normal for each source to supply about 50% of total income.

In the last couple of years, most schools have jacked tuition rates as high as they could. So student fees still supply about 50% of the gross. But gifts have been way off the mark as far as postwar costs go. So has income from endowment funds.

There's at least one good reason that giving isn't the big-scale operation it used to be. Higher taxes have cut down the number of the very rich who once gave so lavishly to the colleges. Close to 75% of all donations now come from those in the \$5,000-a-year, or under, bracket.

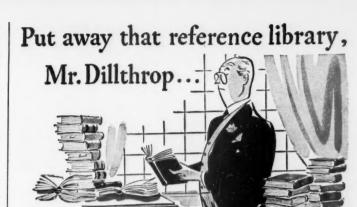
Endowment-fund income today suffers from the same cheap-money ailment that plagues the reserves of the life insurance companies (BW-Apr.9'49, p92). Orthodox investments like bonds and mortgages haven't paid what college treasurers consider a living wage for a long time. The schools have been forced to start hunting for other investments that can bring in the dollars. · Profitable Shift-And they have found them. About \$1-billion (40%) out of a total collegiate endowment of about \$2.5-billion is now invested in business and income-producing real estate. Before the war, business holdings came to only about 20% of the total.

This break from traditional endowment-fund investments has, on the whole, been a profitable one. Here is what a committee under Dr. Carter Davidson of Union College found in a survey for the American Council of Education:

At the time of the study, a little more than a year ago, 455 colleges (out of a national total of 1400) were operating commercial enterprises of some sort and were selling products to the outside. In the 1947 fiscal year, the schools took in about \$150-million from their businesses.

All of this, of course, didn't come from actual business properties owned by the colleges. About \$56.6-million went into the tills of 176 schools for applied research work; 204 schools got close to \$36-million for technical services, like testing and counseling; 40 received \$500,000 from patent royalties.

• Business Take—But almost \$28.1-million went to 150 schools as profit from



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the operation of farms, printing plants, shops, creameries, and laboratories. Another 148 colleges had an income of \$13.7-million from agricultural properties, apartments and dwellings, and from factories and businesses received as gifts. And the 159 colleges who bought commercial properties out of endowment funds, or out of income, reaped a profit of \$16.7-million from their investments.

Many schools, however, have bought with the future, rather than the immediate, return in mind (BW-Dec.27 47,p60). They have borrowed to cover most of the cost of their purchases. That means that over the next 20 years or so all their earnings will be poured into paying off the loans. After that their properties will be owned free and clear; the return then should be a healthy one.

 Opposing Views—But not all college officials feel the commercial investments are worth while. Businessmen, of course, have soured on them because of the tax angle. So have many of the Washington lawmakers.

The cap-and-gowners' main criticism is that a lot of the buying will endanger the school's future financial position. They point out that many of the purchases were made at boom-time prices. If the country runs into a serious depression or a prolonged recession, the school may have to take crippling losses.

What gripes businessmen is that they think the tax-exempt status gives the school business an unfair competitive edge-that the ordinary company can't shave prices and still make a profit the way the school business can.

Both the Ways & Means Committee of the House and the Tax Bureau have worried about the loss of revenue. There have been public hearings to see if the tax laws shouldn't be amended to cover income from strictly-commercial college properties. But nothing has happened yet.

· Certainly Healthier-The colleges deny that they use their tax-exemption status as a basis for unfair competition. "It is certainly an infinitely healthier thing," they say, for colleges to add to their living by business investment than to rely on "outright federal subsidies . as has been urged even by some leading educators."

ANOTHER BANK MERGER

Another New York bank will bow out soon. It's the little Bank of Yorktown (deposits as of June 30: \$36.2million), located in Manhattan's garment district.

Followers of the over-the-counter market noticed a couple of weeks ago that Yorktown stock was staging a rapid rise. From a bid price of around \$37, it rose last week to \$52 bid, \$57

asked. Rumors spread that several larger New York banks were looking over Yorktown, thinking of acquiring its deposits—and its strategic location.

Then the cat was let out of the bag. The Marine Midland Trust Co. admitted it was negotiating to buy the Bank of Yorktowns' stock. Marine Midland, with \$287-million in deposits as of June 30, then ranked 59th among U.S. commercial banks. Acquisition of Yorktown might boost it to 48th place.

Book value of Yorktown stock was \$45.65 a share as of June 30th. Such bank deals are often made at book value; New York Trust Co.'s purchase of Fulton Trust Co. last month was one example (BW-Aug.6'49,p70). But observers believe Marine Midland is going to have to pay more than Yorktown's book value. They think the price per share may be as high as \$58.

Why the premium? Observers' answer: competition.

L.I.R.R. ASKS APPRAISAL

The trustees of the Long Island R.R. want an outside opinion on the controversial engineering problems of their ailing road. Last week they asked the U. S. district court for permission to spend up to \$25,000 for an investigation by Coverdale & Colpitts, New York management engineers specializing in transport.

If the court approves, Coverdale & Colpitts will start by investigating the N.Y. Connecting R.R. (BW-Jul.2'49, p54). The N.Y. Connecting, jointly owned by the Pennsylvania R.R. and the New Haven, uses tracks and services of the Long Island. It has been charged that the Long Island is not getting enough rental for use of its facilities.

FILM BRIEFS STOCK DEALERS

A movie briefed security dealers throughout the country this week on an offering by General Public Utilities Corp. of common stock of its subsidiary, Rochester Gas & Electric Corp.

The 40-min. film gave the dealers the basic facts about Rochester Gas and complete details on the mechanics of the offering. First Boston Corp., Lehman Bros., Wertheim & Co., and Merrill Lynch, Pierce, Fenner & Beane are managers of a nationwide group of dealers who will solicit subscriptions.

The stock is being offered to General Public Utilities stockholders in order to simplify G.P.U.'s corporate structure as required by the Public Utility Holding Company Act. G.P.U. at present holds all of the 835,000 outstanding common shares of Rochester Gas.

Use of the film saved the time of company officials, who would have had to travel to financial centers to talk to dealers. "Automatic" Sprinkler protection in the retail section, Danaky-Faxon Stores, Inc., Busalo, N. Y.

Silent partners for increased savings

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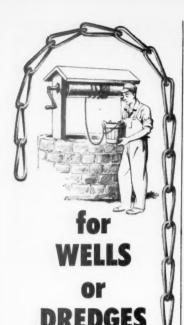
We know that money-saving is not the only reason for buying fire protection equipment, and for that reason each installation which we make is based upon a careful survey of your property and processes. If the problem is unusual, it is worked out in our own laboratory and testing facilities. In that way we are able to design, engineer, install and then assure you of the best in fire safety with (Iulomalic Epringless). They're an important investment today . . . perhaps welcome protection tomorrow.

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OFFICES IN PRINCIPAL CITIES OF NORTH AND SOUTH AMERICA

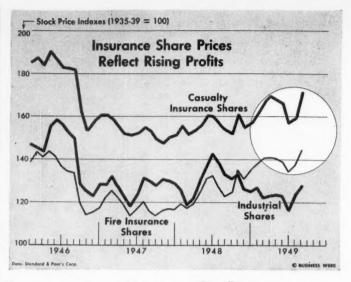


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Insurance Picture Is Rosy

First-half earnings of fire and casualty companies have as much as doubled over 1948. Losses are down and premium rates have finally caught up with costs. Fire stocks are at 19-year high.

By this week, most of the fire-insurance and casualty-insurance companies had published their semi-annual statements. From the way the figures added up, they are doing very well.

• Earnings Climb—For some fire companies first-half net income was twice as big as earnings in the same period of 1948. Nearly all showed healthy gains. And that's the main reason why insurance stocks have been performing so much better than the market as a whole (chart, above).

Right now, Standard & Poor's index of fire-insurance stocks is at its highest point since 1930. The index of casualty-insurance stocks is at its highest since just before the stock-market break in Sept., 1946.

This showing of strength comes as no great surprise. Toward the end of last year, the postwar rise in fire losses began to taper off (BW-Feb.19'49,p95). And the big increase in premiums written after the war-coupled with premiumrate boosts-began to pay off in increased earned premiums.

• More to Invest—The jump in premium volume, of course, has meant more money for insurance companies to invest. And income from investments is an important part of their earnings. Fire companies have about 40% of their portfolios in common stocks, mainly high-grade issues with steady dividend records. The more constants

scrvative casualty companies have about 20% of their portfolios in high-grade common and preferred stocks.

Along with the boost in premiums has gone a sharp drop in losses—for both fire and casualty companies. This week Alfred M. Best, Inc., the industry's figure-keeper, reported losses for stock fire companies had dropped to 45% of premiums earned during the first half of 1949. That compares with a loss ratio of 56.3% in the same period last year.

For casualty companies, losses were 53% of premiums earned-against 56% last year.

• Where Profits Stand—It's true that the cost of doing business went up slightly for both fire and casualty companies. But the added expense wasn't enough to offset the gains. Statutory underwriting profit for fire companies was about 12% of earned premiums for the first half; for casualty companies, the rate was about 5.3%.

But to get the real profits picture, you have to figure the increase or decrease in the company's equity in its unearned-premium reserve. This equity arises from advances the company makes from surplus to get new business. The advances cover the cost of agents' commissions, premium taxes, and office overhead.

For fire companies, the unearned equity usually runs about 40% of the

entire premium. For casualty companies, which have lower new-business costs, the rate is about 35%.

• True Profit—So it follows that when a company is getting more new business than it is losing old, the equity—and the true profit—increases. And for the first six months of this year, property-insurance companies continued to get more business than they lost. For fire companies, the gain was about 8½%, compared with 16% in the first half of 1948, 30% in 1947.

• Dividends—Even though the rate of increase in new business has tapered off, this too is healthy—from a dividend standpoint. It eases up the pressure on surplus; that is, the funds that have to be earmarked to cover new-business expenses. That means more should be available for dividends. (A few companies already have jacked up their 1949 payments to stockholders.)

On the whole, though, insurance companies are conservative in their dividend policy. In 1948, the stock yield ranged from about 3.5% to 4.5%. But many investors look on the shares as excellent "depression insurance." Their earnings usually go up in the early stages of a depression. The reason is that the companies get the benefit of a lag in their rates behind dropping costs of replacement.

Of course, it works just the other way when an inflation comes along. Insurance rates, which must be approved by state insurance departments, lag behind rising costs of replacement. The industry has just passed through one of these

"squeeze" periods.

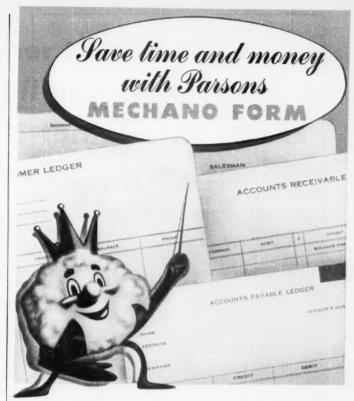
• Easier Buying—For you, as an insurance buyer, you will probably find that this fall it is a little easier to get the kind of policy you want. In the years after the war, many companies put a ceiling on the amount of new business they would write—because of the drain of surplus. Now that the volume of new business is slowing up, the companies can pretty well give you whatever you want.

TOBACCO TAX PROTESTED

Massachusetts tobacco retailers are up in arms over a sudden boost in the state tobacco tax. Last week the legislature raised the eigarette levy from 4¢ to 5¢ a pack, and put a 10% tax on tobacco and eigars. Proceeds will be used to meet the rising costs of old age assistance.

What particularly galls the tobacco retailers is that the tax increase, which became effective Sept. 1, was put through without any preliminary hearings. They have organized a protest committee which will try to get the boost repealed.

The retailers predict that the new tax will drive cigar smokers to cigarettes



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and increase cigarette "smuggling" from other states. The retail price for cigarettes in Massachusetts is now \$2.15 a carton. In neighboring New Hampshire, it's \$1.80. And Maryland cigarettes are available by mail for \$1.49 a carton, plus postage.

FINANCE BRIEFS

Dividend casualties are showing up in the steel industry. Last week both Follansbee Steel Corp. and Superior Steel Corp. decided to take no action on common disbursements normally due now. Follansbee has been paying 75¢ quarterly on these shares; Superior 25¢ a quarter, with occasional year-end extras.

New bond flotations by corporations last month totaled only about \$50-million, compared with \$282-million in July and \$167-million in August, 1948. New stock issues added up to under \$20-million—only half last August's mark.

Bullocks, Inc., prominent West Coast department- and specialty-store operator, has borrowed \$10-million from New York Life on a 15-year 3% note. This will refund bank loans, augment working capital.

July earnings of the Class 1 railroads (BW-Sep.3'49,p77) came to only some \$27.2-million. They were \$76.7-million last July. The Assn. of American Railroads also reports that in the first seven months of 1949, earnings totaled only \$200-million, compared with \$336-million in 1948.

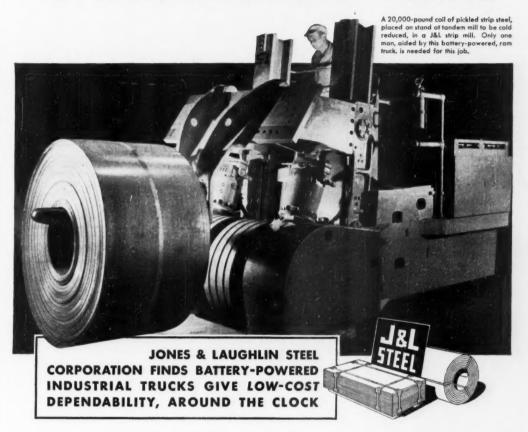
The proposed merger of Manhattan's Fulton Trust Co. into the New York Trust Co. (BW-Aug.6'49,p70) was approved last week by stockholders of both institutions. The merger took place immediately.

Chicago & Southern Airlines will pay a 35¢ dividend on its common stock on Oct. 1—the first payment common stock holders have received since 1945.

Television development costs continue to drain the broadcasting industry. Despite a 5% jump in sales, American Broadcasting Co. showed a \$46,000 loss in the first half of 1949. Last year it made an \$846,000 profit in the same period.

Cities Service Co. apparently finds itself flush. It has just announced that it will call for redemption on Oct. 1 of \$9.5-million of its deb. 5s, 1958 at a price of 102% of par.

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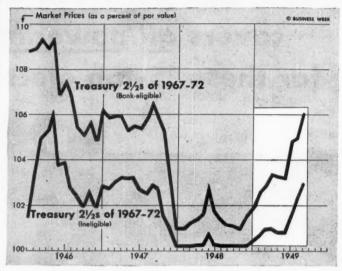


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Latest Treasury certificates bring interest rate down from 11/4% to 11/8%; and there may be a drop to 1% sometime in the future. But it will be a slow process. Rediscount rate will be cut.

The government's money managers will continue to feed the business recovery with easy money-but the Federal Reserve Board and the Treasury don't intend to let the market run wild. That's the lesson you can draw from their latest operations.

· Cut?-The Treasury has just announced that it will offer a 11% oneyear certificate in exchange for the \$1.3-billion of 2% bonds that come due Sept. 15. On its face, this is a cut in interest rates; previous certificate issues have paid 11%.

But actually, market quotations on outstanding issues a few weeks ago indicated a rate of about 1% for one-year certificates. The Federal Reserve System had to do some fairly heavy selling from its short-term portfolio to bring the rate into line with a 11% offering. · Slow Process-This means that the Treasury and the Federal Reserve have decided to take their time in letting the rate structure settle lower. They aren't going to hammer it down all at once. If they think business needs it, they may cut the ticket to 1% on the next offering.

The Treasury has announced that it will put out another certificate in October to roll over the \$6.5-billion certificate issue maturing then. This could be the occasion for cutting the rate again. But most Wall Streeters think it is a little too soon. They expect the Treasury to put a 11% tag on that issue, too.

In December, when the Treasury has a maturity of about \$4.5-billion to handle, it will issue an intermediateterm note instead of a certificate. This will give investors a somewhat fatter

Security Price Averages

Industrial 149.7 149.0 150.6 160.8 Railroad. 37.9 37.5 39.0 51.2 Utility.. 75.9 75.7 75.8 71.9 Industrial 98.6 98.4 Railroad. 82.3 82.6 81.2 Utility . . 98.5 97.9 97.5

Data: Standard & Poor's Corp.

yield without necessarily changing the rate structure.

• Long-terms Up—Meanwhile, the price of long-term government bonds has been going higher and higher (chart). Most issues are now back where they were around the middle of 1947, before the Federal Reserve started trying to put the brakes on the postwar inflation. The bank-eligible 2½s of 1967-72 were quoted at 106 4/32 this week. And the ineligible 2½s of 1967-72 were 103 3/32.

The long-terms probably are now fairly close to their tops—at least for the time being. Nobody knows just where the Reserve Board would try to put a ceiling on them. But you have to go clear back to the spring of 1946 to find prices generally higher than the ones that are quoted now. And at that time, certificates were paying only §%. Any big rise in long-terms would put their rates out of line with the short-terms.

• Rediscount Cut—The Federal Reserve rediscount rate is due to be cut any day now. But that will have no direct effect on the bond market. The Reserve System customarily keeps the rediscount rate slightly above the going rate on short-term governments. It has

been 1½%. Now that the certificate rate has dropped, it probably will be

stepped down to 11%.

TIMING!



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Corporate Bonds Follow Treasuries Upward

It has been a good summer for corporate bonds. Generally, they have been responding well to the various steps taken in Washington that have caused such pronounced buoyancy among Treasury bonds (BW-Jul.9'49,p86). And they were meant to.

Thus far the greatest beneficiaries have been the investment-grade corporates. Many such issues have

erased almost all of their losses since 1946 (table). But there have been signs recently that some of their strength has finally started to spill over into the so-called "goodgrade" bonds.

Most lower-grade issues have also been rising. But they haven't been nearly so spry on the upside as their blue-chip or near-blue-chip brothers.

(All Prices Are Given in Per Cent of Par)

Mood		Offering Price and Year Sold	1946-4 High	9 Range Low		% of Maxi- mum 1946-49 Loss Recovered
Ratin						
	Amer. Tel. & Tel. 25/8s, 1986		100.37	85.00	97.00	78.1%
AAA			141.00	115.25	127.62	48.0
BA	Balto. & Ohio 4s, 1975		107.50	79.00	85.50	22.8
A	Bethlehem Steel 3s, 1979	100.50 (1949)	103.25	101 00	103.25	100.0
AAA	Boston Edison 234s, 1970		108.75	98.12	103.87	54.1
BAA	B'klyn Union Gas 27/4s, 1976	103.00 (1946)	103.25	84.50	99.25	78.7
AAA	Chesapeake & Ohio 41/2s, 1992		151 37	119.50	129.50	31.4
A	Chic., Burl. & Quincy 23/8s, 1970.		103 37	90.25	98.75	64.8
AAA	Cincinnati G. & E. 2%s, 1975	101.00 (1945)	107.87	96.75	103.00	\$6.2
BAA	Colorado Fuel & Iron 4s, 1964	100.00 (1949)	100.00	98.00	98.00B	****
BAA	Crucible Steel 31/48, 1966	100.00 (1946)	101.87	88.50	94.00E	
A	Dow Chemical 2.35s, 1961	100.00 (1946)	101.12	94.50	100.00	83.1
A	B. F. Goodrich 2%s, 1965	100.50 (1945)	105.87	97.50	102 50	59.7
A	Great Northern 2%s, 1982	101 14 (1946)	100.62	82.50	91.00	46.9
A	Koppers Co. 38, 1964	*	107.00	99.50	103.75	56.7
BAA	Lehigh Coal & Nav. 31/28, 1970	100 00 (1945)	108.00	90.00	93.12	17.3
AA	May Dept. Stores 25/4s, 1972		100.25	94.50	100.50	104.3
	N West Deep 8 To 28/2 4078	102 50 (1045)	106 25	04.13	101 25	
AAA	New York Pow. & Lt. 23/4s, 1975. Norfolk & Western 4s, 1996	102.30 (1943)	106 .75 143 .00	94.12 126.50	101.25	56.5 18.2
BA	Northern Pacific 41/28, 2047		110.00	72.50	78.75	16.7
AA	Pacific G. & E. 3s, 1971		110.50	98.50	105.12	55.2
BAA	Pennsylvania R. R. 41/4s, 1984		135 50	84.50	88.00	6.9
A	Reading Co. 31/88, 1995		105.50	81.50	89.87A	
AA	Shell Union Oil 21/28, 1971		101.50	91.00	99.00	76.2
AAA	Socony-Vacuum Oil 21/4s, 1976		100.50	90.25	99.50	90.2
BAA		101.50 (1946) 98.00 (1946)	102 .25	80.00	87.00	31.5
AAA	Standard Oil (N. J.) 2%s, 1971	98.00 (1940)	99.73	91.50	97.75	75.8
A	Swift & Co. 25/85, 1972		103.75	95.25	100.12	57.3
BAA	Texas & New Orleans 3%s, 1990.	100.00 (1946)	101.00	88.12	91.75	28.2
BAA	U. S. Rubber 2 %s, 1976		101.50	90.00	94.87	42.3
AAA	Union Pacific 21/2s, 1991	102 . 19 (1946)	99.62	84.12	96.37	79.0
BAA	Universal Pictures 3%s, 1959		104.25	75.00	82.00B	23.9
AA	Virginian Ry. 3s, 1995	106.00 (1945)	113.00	92.12	104.37	58.7
BA	Walworth Co. 31/4s, 1976	103.00 (1946)	107.25	85.00	85.00	
AA	Westinghouse Elec. 25/ss, 1971	100.50 (1946)	103.00	96.37	101.00	69.8
BAA	Wheeling Steel 31/4s, 1970	103.00 (1945)	108.00	93.50	97.50	27.6
*Out	standing before 1945. B Bid pric	e. A Ask pr	ice, no bio	showing		

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RUBBER BARGAINERS John Collyer (left), B. F. Goodrich president, and George Bass, of C.I.O. rubber union, couldn't agree. Even more, Bass' ambitions are . . .

Behind the Rubber Strike

- In steel this week, management and labor were in a state of suspense, waiting for the fact-finders' report.
- At Ford, tempers were getting shorter, but bargaining between company and the auto workers were on and on.
- At B. F. Goodrich in Akron, meantime, a strike was very much a fact.
 And the fact behind this fact is mainly one man—who potentially may grow into a much bigger figure in the C.I.O. and thus has a special significance:

George R. Bass' burning ambition for years has been to win the presidency of the United Rubber Workers (C.I.O.). Today, Bass has become a factor in the fourth-round wage struggle.

Strike—U.R.W.'s strike against the B. F. Goodrich Co. (BW-Sep.3'49, p82) is the first major walkout of the new wage-setting season. As such, it's unique. Most unions are biding their time—awaiting the outcome of steel bargaining, and the United Auto Workers' dealings with Ford.

Not so Bass. As head of the important Akron Goodrich local, he had a big part in calling the Goodrich strike for Aug. 27. His critics say he engineered it as part of his political strategy. This week, Bass became U.R.W. secretarytreasurer. The union executive board appointed him to fill the vacancy created by the death of Charles Lanning.

• Timing—The strike was called three weeks before the U.R.W.'s annual convention, which opens in Toronto on Sept. 19—and at which Bass is a candidate for the presidency. Politically, this is noteworthy:

If Goodrich settles before the con-

vention, Bass will win an invincible prestige. If the strike is still on, he can play on rank-and-file sympathy for a militant strike leader. So he'll hardly lose ground as a result of the strike.

• Oldtimer—Bass isn't a stranger to the rubber industry—though he isn't very well known outside it. He is potentially one of C.I.O.'s important union leaders. But he's not a "young intellectual" of the Walter Reuther type. You can thumbnail him as a rough-and-tumble leader who came up through the ranks.

Bass was born in the Tennessee valley 46 years ago. He got his first real job in the rubber industry as a hose-builder with Goodrich in Akron. That was in 1919 when he was 17. He was laid off during the depression of 1921, but got his job back a year later.

• Organizer—He worked hard to help organize the first Goodrich local of U.R.W. and was one of its first 400 members. In 1940, the union signed him up as a field organizer and sent him to Memphis where Firestone was the target. He still carries the marks of that campaign. After several threats, he was finally waylaid by anti-union.



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Only a few years ago, a man who proposed to use adhesives in any of the ways pictured above would have been called "visionary." But not today. Armstrong's Adhesives already have made two of these three uses entirely practical. The third promises to be possible soon.

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RUBBER UNION POLITICS popped up in Detroit, too, last week. Local union members picketed U.R.W. offices to protest what they called a "rigged" election to give George Bass delegates additional votes, freezing out L. S. Buckmaster backers.

ists, and severely beaten. It took 31 stitches to close up his head.

Bass returned to Akron, and in the fall of 1940 was elected president of the Goodrich local. With the exception of 1945, he has held the local presidency ever since.

• "Big George"—Bass is heavy-set, topping 200 lb. He is seldom without a cigar. Unionists who know him as "Big George" say he can be a good friend, but a tough man to have against you.

Industry knows him as a hard negotiator—one who avoids compromises and give-and-take bargaining.

Bass himself says he was once a "champion" euchre player—and that it helps him at the bargaining table. He claims he has prevented more strikes than he has led. And he says he won't call a strike unless he is convinced that it's the only way to gain his goals.

For instance, he says the current Goodrich strike could have been averted "if the company had offered as good a contract as the one which expired on Aug. 26." But the union wants something more than that: It's after a wage increase and \$100-a-month pensions.

• Critic—Last year, Bass criticized a precedent-setting \$11\epsilon\$ settlement by L. S. Buckmaster, then U.R.W. president. Bass said the union could have hammered out better terms if it "hadn't been so dammed eager to grab the \$11\epsilon\$.

Already the most powerful figure in an anti-Buckmaster faction in U.R.W., Bass pressed his fight against Buckmaster's "soft" bargaining at the union's 1948 convention. He opposed Buckmaster's reelection, lost by 810-808.

(Buckmaster's victory over Bass was short-lived. A few months later, the U.R.W.'s general executive board ousted Buckmaster on charges of malfeasance, and H. R. Lloyd, Akron vice-president, took over. But Buckmaster wants to regain his lost top office [BW—May28'49,p101].)

It will be Buckmaster vs. Bass again this year.

• Steel-Meantime, in steel fact-finding, recommendations of a "just and equitable" contract settlement were due by this week end. That leaves four days for bargaining between bellwether U.S. Steel and the United Steelworkers (C.I.O.) before the union is free to strike on Sept. 14. Union president Philip Murray says it will be enough to show whether a settlement is possible. • Detroit-At Ford, bargaining sessions are getting hotter, and signs indicate that U.A.W. is getting ready for a move of some kind. Company and union got down to bargaining last week on the pension issue-but made no progress. So U.A.W. wrote Ford that: (1) negotiations have now been going on for 90 days; (2) the company hasn't made any concessions on wages, pensions, output standards, or other major issues; so (3) U.A.W.'s patience is wearing thin.

The union didn't serve notice terminating its day-to-day extension of the Ford contract—or say definitely that it intends to. That would mean a strike. While events at midweek indicated an extension of contract talks—and of a Sept. 12 technical strike deadline under Michigan law—that doesn't mean that a Ford strike notice isn't possible.

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1 When Mr. X sat down for an interview at Dravo Corp., he felt he could qualify as a trainee in structural drafting; Dravo, of course, didn't know. But it had a simple way of finding out. For, before interviewing, it had gone to USES for help on aptitude tests and . . .



3 Using experienced Dravo draftsmen as guinea pigs, the two tried out different tests to see on which tests good draftsmen would score high, poor ones low. That meant the USES men had to find out how skilled each of the guinea pigs was. So . . .

Employment Tests: Yardstick

Hiring a man for a job that requires lots of training is often a gamble. If he quits or has to be fired, the employer has wasted time and money. If he sticks—but has little aptitude for the job—it takes longer to train him, and costs more.

• Safe Way—Many employers, including Dravo Corp. in Pittsburgh, have found a good way to cut the odds in this gamble. More and more they are using the job-aptitude testing services offered free by the U.S. Employment Service and by many of the nation's 1,700 local

public employment offices. Dravo, and scores of others, are finding that job testing can save them a lot.

USES, now back in the Dept. of Labor, has devised a general aptitude test to measure 10 basic abilities needed for several thousand jobs. The yard-stick consists of 11 paper-and-pencil quizzes and four apparatus tests. Last year, USES and cooperating local employment offices gave the test to 73,800 people.

 Others—USES has also developed 225 tests to check an applicant's aptitude for



2 USES technicians Orville Dawson (left) and Ralph Anderson had got together to find a measuring stick that would work for Dravo.



4 DAWSON (right) got ratings from Ernest Willison, head Dravo draftsman, on all the men who took USES stock tests.

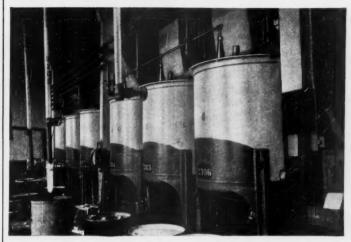
for Hiring

a specific job. These are used to uncover the abilities of people who have had no previous training or work experience in the job to be filled. Last year, USES and the local employment offices gave these tests to more than \$3,000.

Finally, USES has worked out: (1) oral trade questions to test the job proficiency of experienced workers in 240 trades; and (2) performance tests, to measure typing and stenographic skills.

The specific aptitude tests often were developed to help one employer fill a

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EMPLOYMENT TESTS (continued from page 113)





So, Mr. X, along with others, was given a short written aptitude test designed to show his job qualifications, and . . .

He took a manual dexterity test to show whether he could be trained to use draftsmen's tools quickly and easily.



Mr. X got the job when he came through the tests with high scores. Dravo is now prepared to spend an estimated \$2,200 on him. That's what it takes to turn a man into an experienced structural draftsman. All nine men picked this way have made good.

specific job. But once used, the test becomes standard for selecting candidates for the same type of work in other companies. Dravo, for instance, wanted a test for structural draftsmen. There wasn't one. So USES set up a tailormade quiz. It's now standard.

• Testing-Ordinarily, public employment offices-in conjunction with USES -do the testing free on request by an employer. In some cases, though, employers do the work. But when they do. they must agree to: (1) apply tests scientifically, with personnel trained by USES; (2) buy supplies and apparatus at nominal cost from USES; and (3) make available to the government any significant data that turns up.

More than 300 employers are now using the tests on this basis. Several thousand others are letting employment offices do the actual testing and evaluating, and are hiring workers on the basis of USES tests.

Occasionally, USES tests are used to help determine promotions, or major job changes. But the employment service won't let its tests be used to weed out employees when the work force has to be cut.



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Vacation Scheme

St. Louis contractors use stamps to give bricklayers, who change jobs often, a yearly paid vacation.

How can you give an employee a paid vacation when he has worked for several companies during the year?

That's not a problem many employers have to face. But a few of them—in building and construction, warehousing, longshoring, and shipping—have seen it become a pressing issue.

Pressure—In these industries, the unions are out to get the same sort of paid-vacation clause that's common in manufacturing-industry contracts. Where negotiators couldn't work out a system for figuring vacation-pay credits, the unions, generally, jacked up wage demands.

Negotiations in St. Louis between bricklayers and the Mason Contractors Assn. followed that pattern earlier this year. But then a union-management arbitration board used a little imagination. It worked out a vacation-pay plan using stamps that covered the 1,400 bricklayers. Since then the scheme has attracted a lot of outside attention.

• Solution—Here's how it works: By contract, employers must pay 3% of payroll into a vacation fund (the union took that instead of an hourly pay hike.) They do it by buying vacation-pay stamps in 10¢, 25¢, 50¢, and \$1 denominations from the Tower Grove Bank & Trust Co., in St. Louis. When they make up regular pay envelopes for brick-layers, the employers include stamps valued at 3% of the total wage. If pay amounts to \$110, for instance, \$3,30 worth of stamps also go into the pay envelope.

The bricklayer then sticks his stamps in a stamp book that covers the period June 1 to May 30. Stamps can't be cashed until the end of each vacation-pay year. At that time, each bricklayer gets his stamp book certified by the labor-management stamp committee. Then he cashes it at the Tower Grove Bank.

• Savings—The year-end redemption date actually makes the plan a form of compulsory saving. The local's financial secretary, Clyde W. Martini, explains if this way: Most bricklayers "don't save a nickel" from wages. So they agreed to have vacation money put aside, where they can't touch it, until vacation time.

So far, the only way the stamps could be cashed sooner would be in case of death. The widow, or other beneficiaries, of a bricklayer would get his accumulated stamps and the union would redeem them. The local would then keep the stamps in its treasury until they could be converted into cash at the bank the next lune.

The stamp committee figures the average bricklaver will collect about \$5150 worth of stamps in the year—enough for at least one week's vacation.

• Bug—As the committee sees the plan, after three months operation, it has only one real bug: It's likely to lead to a lot of bricklayers taking time off in the same week or two in June—right after they have cashed in their stamps. The union and contractors are now studying this problem.

• Approval—Many small contractors hesitated at first about agreeing to the paid-vacation clause in their new contracts. They were afraid it would mean a lot of bookkeeping and banking confusion. Now they're sold on the plan. They have found that the Tower Grove Bank has the bulk of the work. It gets a 3% handling charge (figured on the cost of stamps issued) for its role in the

plan. The contractor who pays the bank

\$103 for \$100 worth of stamps figures

it's well worth the slight extra charge to

be free of bookkeeping problems.

Metal Strike Ends

American Zinc resumes bargaining with smelter workers after officers sign affidavits. Union lost heavily by long strike.

American Zinc, Lead & Smelting Co.'s long troubles with the left-wing Mine, Mill & Smelter Workers (C.I.O.), seemed near an end this work

• Bargaining Resumes—Company and union are talking contract terms—for the first time in 12 months—in Fairmont City, Ill., and Metaline Falls, Wash. These are the only American Zinc operations at which M.M.S.W. still holds collective bargaining rights. It lost out to A.F.L. unions at two other plants during the long strike.

The union struck first at the Metaline Falls mine on July 1, 1948. Six weeks later, its walkout spread to mills and smelters at Fairmont City. Hillsboro, Ill., and Columbus, Ohio. At about the same time, American Zine said it wouldn't bargain any more with M.M.S.W. until union officers signed non-Communist affidavits (BW-Jun.11 '49,p100).

• Self-Preservation—Recently, the union "reluctantly" decided to comply with the Taft-Hartley affidavits requirement. It did so, it said, as a matter of self-preservation (BW-Aug.6'49.p78).

It had lost jurisdiction at the zincoxide plant in Hillsboro to A.F.L.'s Hod Carriers, Building & Common

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the classified advertising of the world of business management. For information write "clues," Business Week. Laborers. And the M.M.S.W. members at the Columbus plant had voted to return to work and switch over to A.F.L.'s Chemical Workers. Still another secession movement at the big Fairmont City operation was apparently gaining headway.

• Filed—M.M.S.W. officers filed with the National Labor Relations Board oaths that they aren't Communists. Then the union asked American Zinc

to resume contract talks.

That had to wait on an NLRB representation election between M.M.S.W. and a right-wing C.I.O. rival-the Progressive Metalworkers Council. Victory went to M.M.S.W. by 398 to 260. Three days later, American Zine agreed to resume bargaining.

Fewer Jobs—Although early resumption of work at both places is now likely, the number of jobs may be substantially less. Some production was shifted to the Hillsboro and Columbus labels will be least bloom.

plants, will be kept there.

And, in June, the company put out the fires in six of eight furnaces at the Fairmont City smelter. Company engineers think the subsequent cooling ruined the brick furnaces. Until they can be rebuilt, furnace employment may be about half the prestrike figure.

• Unfair?—American Zinc signed a twoyear contract with the A.F.L. Hod Carriers for the Hillsboro plant when it reopened last Aug. 11. The company also has a two-year contract with the A.F.L. Chemical Workers for the Columbus plant, running to Feb. 1, 1951. But M.M.S.W., now that it's in the clear with NLRB, wants to move back into both of these plants. It is preparing to file charges of unfair labor practices against American Zinc—alleging that the company improperly recognized the A.F.L. unions in an effort to oust M.M.S.W. from its plants.

The company's defense: The workers voted decisively to quit M.M.S.W., bargain through A.F.L. unions.

How Wage Act Will Change

Minimum pay is now definitely set at 75 \(\extit{e} \). And there will be new exemptions for retail and service businesses. Only big differences in House & Senate bills are on coverage and authority to sue.

The 40¢ minimum wage, in effect for most industries since 1940, will go up to 75¢ around the first of the year.

• Definitely Set—The boost became certain last week when Administration Democrats in the Senate, aided by Republican leader Taft, went along with the 75¢ floor voted by the House on Aug. 11 (BW-Aug.20'49.pS8). The Administration beat off attempts by Southern Democrats to hold the minimum to 65¢, or to tie it to the cost of living.

Final action by Congress has to wait on the outcome of a joint-conference on differences between the House and Senate bills. A decision won't come until after the House resumes business on Sept. 21. But similarities and differences in the two bills offer some definite clues now to its final form.

• Points of Agreement—The one big thing both bills include is the change to the 75¢ minimum. This will raise pay for about 1.5-million workers of the 22.6-million who are now covered by the wage-hour law. And it will have an indirect effect on other wages. For employers will have to raise the pay of some workers who get more than 75¢ in order to maintain existing differentials.

The final bill will also tighten bars on the use of "oppressive child labor" in interstate commerce, or in production for interstate commerce.

The bill will revise present exemp-

tions on retail and service establishments, too. There's only a minor difference in House and Senate bills on the status of joint manufacturing-retailing establishments. Under a revised interpretation of retail and service exemptions, a company can qualify for wage-hour exemption if: (1) over 50% of its sales are made within the state; (2) 75% of its sales are not for resale—but to the ultimate consumer; and (3) 75% of sales are recognized as retail by the industry.

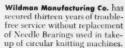
• Aimed at Rulings—This provision was pushed in both branches of Congress to nullify current interpretations of the law by the Wage-Hour Administration. The administration had decided retail firms are not exempt if: (1) they buy, or deliver, an appreciable volume of goods across state lines; or (2) they get more than 25% of gross receipts in a six-month period from "non-retail" sales.

• Differences—The House and Senate bills, however, differ on two major points:

Coverage. The Administration wanted to increase present coverage, but Congress didn't. The House bill would apply the wage-hour law to 150,000 new workers. But, at the same time, it would deny coverage to about 1,160,000 who now come under the law. The bill would make wage-hour rules apply only to processes or occupations "closely related, or indispen-









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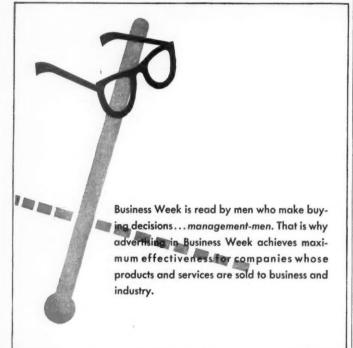
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sable," to production of goods for interstate commerce. The Senate would exempt about 200,000 workers now covered by the law, keep coverage over all workers "necessary" to production for interstate commerce.

So when Congress finally agrees on changes, few-if any-additional workers will be covered; somewhere between 200,000 and 1-million workers will lose

Authority to sue. Under the present law, only an employee can sue for back minimum-pay or overtime, which the Wage-Hour Administration has ruled is due him under the law. The WHA can't file suit, or compel the employer to make payment. The House bill would authorize WHA to "supervise" payment of back wages due workers. But it still wouldn't let the agency go to court. The Senate version would allow WHA to file suit if the employee involved agreed.

LABOR BRIEFS

A 5¢ hourly raise for 1,500 production workers at the Ansco Division of General Anilme & Film Corp. last week averted what A.F.L. unionists said would be "probable strike action."

The wage-hour law now covers rural homeworkers who "string" tobacco bags. A federal court decided that way in ordering three southern employers (who were paying 5¢ to 13¢ an hour) to meet minimum-pay requirements for work done at home. But the new minimum-pay bill in Congress may exclude homeworkers.

Ohio's "loyalty oaths"—required from Ohioans who ask for unemployment compensation—are under court attack in Columbus. Cleveland attorney Jack B. Dworken contends the new state law is unconstitutional.

Wallpaper craftsmen (A.F.L.) have agreed to extend their contract with the wallpaper printing industry for one year. No changes.

Gasoline trucks moved in Chicago last week end for the first time in 21 days. An A.F.L. teamsters strike ended with a 10¢ hourly raise.

The Pictures—James Cutter—52; Int. News—20, 110; Keystone— 128; McGraw-Hill World News— 126; N. Y. Post—21 (lt.); Sovfoto —21 (rt.); Wide World—25, 39; Dick Wolters—22 (bot.), 23 (bot.), 54, 55.

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INTERNATIONAL OUTLOOK

BUSINESS WEEK SEPTEMBER 10, 1949



The Washington financial talks will have to be stretched out if even an interim agreement is to be reached.

Last week's get-together by U. S. and British experts was mainly a waste of time. The British produced lectures on international trade instead of solid facts. This rubbed Washington the wrong way.

So Chancellor Cripps and Foreign Minister Bevin had a salvage job to do first when they got to Washington Wednesday.

Here's another hitch: Neither side wants to come to one crucial point devaluation of the pound.

What the U. S. has to offer in the way of stop-gap help (BW-Aug.27'49, p19) hinges on the British taking this step.

But Washington, after six months of plugging for devaluation, has now clammed up. It doesn't want to broach the matter officially. The reason, of course, is political.

We don't want to take the responsibility for forcing it on the British.

Will Cripps and Bevin raise the issue? Not until they have to. Last week the British Cabinet made this decision: Don't agree to devaluation unless that's the only way to get help out of the U.S.

It's obvious that the sterling area's financial plight will be discussed.

The fact is that the burden of carrying the sterling area has become too much for Britain.

Unofficial London estimates show this: The sterling area (excluding Britain) had a 1948 payments deficit of \$2-billion. There was even more red ink in the first half of 1949—at a rate of \$2.4-billion.

As banker for the area, Britain has been covering the biggest part of this deficit by (1) paying off war debts; (2) providing dollars from London's dollar pool; and (3) making new investments in the sterling area.

It's the sterling balances that cause the biggest headache.

These now total roughly \$12-billion. (Most of this is blocked wartime debt, though part consists of normal working balances for trade.)

Thus, Britain still owes India and Pakistan \$3-billion; about \$2-billion is due Ceylon, Egypt, Iraq, and Palestine.

From mid-1948 to mid-1949 Britain made debt payments of over \$1-billion to India alone. At least \$150-million of this was in dollars.

The result: British exporters found the Indian market easy meat. That's bad. The exporters had little incentive to cut costs or earn dollars for Britain in the tough U. S.

On the other hand, settling up debts has paid off politically, of course. It has probably staved off an economic collapse in India.

Will the U.S. be asked to help liquidate the remaining sterling balances? That's one suggestion going the rounds in Washington this week.

The idea would be this: Washington would back London in getting a write-down, perhaps by 50%, of the \$3-billion wartime debt to India and Pakistan. Then the U. S. would assume, say, half of the remainder, or \$750-million.

The write-down would draw deep scowls from India. Yet New Delhi

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK SEPTEMBER 10, 1949 would get needed dollars—which Britain won't be able to supply much longer:

From the U.S. angle, pumping dollars into the Indian market would help our exporters.

From Britain's angle, removal of inflationary pressure in the sterling area would be good—though British exporters wouldn't like sharing their market with the U.S., of course.

But you can be sure this kind of deal won't be made in a hurry. The U.S. Congress will have to be sold first on a Southeast Asia recovery program. If that happens, then something might be done about Britain's sterling debt.

Don't ignore the behind-the-scenes role France is playing at the dollarsterling talks.

French Finance Minister Petsche figures he has two aces up his sleeve:

(1) The loosening up of French controls over foreign investments. From now on U. S. investors, for example, can freely withdraw their capital as well as profits in dollars.

(2) Removal of some import quotas Oct. 1.

France wants to convince Washington that she is ready to gamble on a freer trade policy.

The idea is to impress Congress as it considers renewal of the Reciprocal Trade Act.

But the Queuille government is staking its life on this policy. It enacted the investment and trade changes against strong opposition from Socialist deputies plus French industry and labor.

So Paris observers figure Queuille will be in for a rough time (1) if U.S. private capital shows no interest in flowing to France, and (2) if the U.S. Congress turns down Truman's version of the Reciprocal Trade Act.

The ban is being lifted on foreign investments in western Germany.

But that still won't bring out the heavy flow of capital that came after World War I.

For one thing, the Russian danger makes long-term investments too rlsky. Then the threat of public ownership hangs over Ruhr coal and steel where much of the foreign money went last time.

The fields that look most promising for investment in Germany are machinery, electrical equipment, optical goods.

A little money would probably go a long way there.

Some new German investments will probably be made, too, by foreign firms that already have branch plants in Germany.

But the bulk of outside capital that Germany wants may come through reinvestment of foreign holdings that have been blocked since 1939.

Of course, proposed investments will be screened carefully.

Each will have to contribute to the German economy by (1) boosting exports, or (2) replacing imports, especially from hard currency countries.

Otherwise the transfer of earnings would be too heavy a drain on Germany's stock of foreign exchange.

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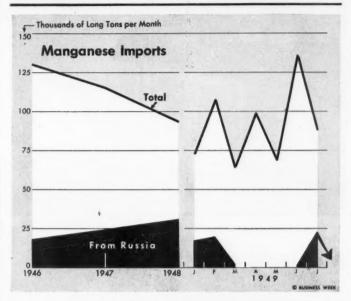
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BUSINESS ABROAD



Soviet Trade Squeeze Fails

Russia cut off manganese shipments as a club to force U. S. to sell it machine tools. Then it resumed them, as a lure. Neither stratagem worked. U. S. merely developed other sources.

Stalin's attempt to put the squeeze on U. S. steel production has boomeranged. After a six-month embargo on Russian manganese shipments to the U. S., he still can't buy any American machine tools. And U. S. industry is finding it easy to buy its manganese requirements elsewhere.

In fact, industry expects to get the estimated 1.4-million long tons of ore it needs this year without Russian help, without dipping into the 570,000-ton inventory—and at no real increase in cost. This is bringing Stalin face-to-face with the possibility that Russian manganese may lose the U.S. market for good.

• Lure—That's why, during July and the first two weeks of August, Stalin allowed some 20,000 tons of manganese—the first, really, since February—to be delivered to U.S. importers. He hoped that, maybe, the U.S. would start trading again—machine tools for manganese. Putting Russian manganese back on the American scene was almost as important to him as getting the tools.

But the Commerce Dept's Office of International Trade never flickered an export license; now Stalin has halted ore shipments again. Best bet is that he will make another feint around December.

 Question of Policy—Freeing Russian manganese, alone, won't alter U. S. policy toward trade with Russia one bit.
 Our policy is: Nothing goes that might build up Soviet war-making ability.
 This means no machine tools unless Russian attitudes and policies do an about-face.

Even then, Washington policy makers would be leery of any sudden switch in Russian tactics. Convincing them would take time. And until they were convinced, Stalin, the tool buyer, would continue to find tough going in the U.S. market-place.

• Alternate Sources—Meanwhile, U. S. industry's worries over manganese supplies have eased a lot since last March. Increased ore deliveries from sources other than Russia came within 150,000 tons of meeting normal domestic requirements for the first six months of this year. And the total for the next six months is expected (1) to cover all current needs, and (2) to offset the first half's deficit as well.

Here's how deliveries to the U.S. in

1949's first half from our three biggest current suppliers compare with all of 1948 (figures in long tons):

Supplier Country	1948 F	irst Half, 1949
India	190,576	157,142
Union of South Africa	183,370	112,054
Gold Coast	118,724	107,142

• Improvement Due—In the Union of South Africa, inland transportation, not pithead production, has been the bottle-neck. So the U.S. and Canada both gave the Union a priority on ore cars. As a result, exports to the U.S. topped 50,000 long tons in June, and it is hoped that this rate will be continued for the rest of this year.

India, also plagued with transportation troubles, has given ore deliveries to dockside a priority second only to the movement of food. Plans call for a record total of 400,000 tons to be exported to the U. S. in 1949.

• Little Trouble—The changeover from Russian manganese to other types hasn't caused much trouble. Both Indian and Gold Coast ore are only a fraction of 1% below the Russian product in grade. Where the manganese content is lower, as is the case in shipments from South Africa, lower prices make up the difference.

The greatest trouble caused by the shift is due to the fact that the new ore differs from the old in its impurities. Thus, some processes have to be altered. But industry went through this twice during the war with no trouble: once when Russian manganese was halted by the closing off of the Black Sea, and then again when the deliveries were renewed.

• Stockpile Slowed—The U.S. stockpiling program has suffered a setback. But even that should be only temporary. If Congress restores the long-range contract authority of the Bureau of Federal Supply, there won't be any permanent harm done—only some delay.

Contracts guaranteeing a market for 10 or 20 years would be the key to heavy investment in such known reserves as exist in Brazil, Belgian Congo, Angora, and Turkey.

Angora, and Turkey.

Russian Plans—Meanwhile, Stalin may be doing a little stockpiling on his own. At least, he isn't selling the U.S. quota anywhere else. And there have been no reports of any labor shifts away from the mines. Chances are, though, he's taking this opportunity to modernize his mines, a project he has wanted to tackle ever since the war.

One thing is certain: Unless the Soviet makes a convincing change in policy, the U.S. won't ship any machine tools to Russia, manganese or no manganese. Conversely, except for an occasional cat-and-mouse bid for renewed trading, Stalin will let the U.S. market for Russian manganese go for good before he gives in.

ARE PEOPLE "ALL EARS" WHEN YOU TALK?

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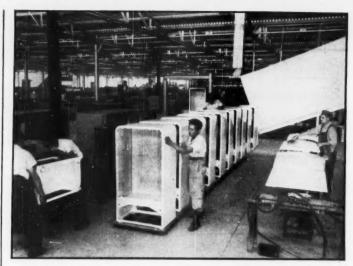
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FRIGIDAIRES, 100% Mexican-made, pour off the assembly line, a sign of . . .

Mexico's Industrial Boom

Government's ban on imports of many U. S. goods gives local manufacturers a real shot in the arm. It has already given Mexico its first favorable trade balance since the war.

MEXICO CITY-The government has recently given Mexican industry a terrific shot in the arm. It has cut off a big batch of imports from its highly competitive neighbor, the U.S.

· Biggest Boost-Greatest stimulus to local manufacturers has been the strict import ban on all luxury goods. No more items such as radios, automobiles, washing machines-and even office equipment-can be brought in from the U.S. A second big boost will come from a new ban on imports of finished textile goods and rayon materials.

The import restrictions are part of an over-all economic policy which lowered the value of the peso to 8.65 to the U.S. dollar. That went into effect only on June 17, yet latest statistics show that the measures are already paying off. During June and July, Mexico came out with a 9-million-peso surplus in its foreign trade. That is the first time the country has been in the black since the war years of 1942-43.

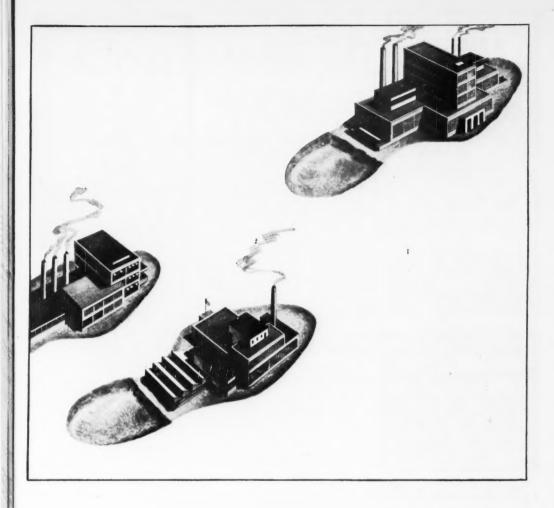
· Output Up-Last week the government released some new figures which looked even more impressive. showed that in one month 17 basic industries turned out goods worth some 2.7-billion pesos (about \$350-million). That doesn't loom too large in comparison with U.S. production. But it's a huge increase over any comparable past period in Mexico.

Mexico has not shut the door on imports from the U.S. completely-as have many other countries which have been faced with a drastic dollar shortage. For example: Mexican law now says that no cabinet or other metal products capable of being manufactured in Mexico can be imported. But it is still legal to bring in necessary parts for re-frigeration or radio units. (There is no ban on heavy industrial machinery.)

· Golden Opportunity-What this policy has done, of course, is to provide a golden opportunity for Mexican manufacturers. Companies that were hopelessly unable to compete with mammoth U.S. plants are now stepping out on their own under the government's protection. For the first time the country has turned out Mexican-made refrigerators and washing machines, and radios completely assembled in the country.

A typical example is the "D.M. Nacional" plant which makes all-steel office equipment under 100% Mexican ownership and management. "El Nacional," as it is known, owned a battery of huge Cincinnati and Cleveland presses which it used to stamp out streamlined office desks. The presses could make all the office equipment for Mexico on a part-time basis.

• Other Jobs-So now "El Nacional" has turned its presses to the job of



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THEN step South with your factory—and you'll step ahead with this fast-growing industrial area in the even greater "growing days" that lie ahead.

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"PLANNING A STORY"

Keeping management men accurately and completely informed is a complex job—but one that is always interesting. Business Week's brochure, "Planning Susiness Week report from the planning stage to its appearance in the magazine. If you would like to have a copy, write:

Research Department

BUSINESS WEEK 330 West 42 St., New York 18, N. Y. making shiny new Frigidaire cabinets for General Motors, and glistening white Bendix washer cabinets for the local Bendix distributors.

In the case of Frigidaire, G.M. has managed to get other sub-contractors to turn out the rest of the unit. The result is the first completely Mexicanmade Frigidaires. Bendix still ships in part of its units, but these too may be completely made in Mexico soon.

• Autos, Too—Another G.M. project is in automobiles. Previously, only the lowest price-range autos were assembled in Mexico. Now the G.M. Mexico City plant is assembling Cadillacs. And, since no more finished cars can be brought into the country, all U.S. manufacturers have set up assembly plants there.

One sour note: The quota for assembled cars has been cut 42% for the coming year. Under the new quota, Ford and G.M. aire allowed to turn out only 5,000 units apiece, Chrysler 3,250. Since quotas were low to begin with, this will (1) produce a car shortage; and (2) boost the unit cost of assembly.

• Appliances—Another factory stepping up production under the new protective umbrella is "Industria Electrica de Mexico S.A." This was the first big plant to get into the manufacture of electric irons, washers, and refrigerators in Mexico.

in Mexico.

1.E.M. (51% of whose stock is held by Mexicans) has operating patent licenses from Westinghouse. It has stepped up refrigerator production to 1,700 units per month. It now makes a model marketed by Sears Roebuck de Mexico under the "Coldspot" brand name. Other assembly lines turn out gas stoves and other appliances. And there has been no complaint about their quality as compared to what used to come from the U.S.

Other big projects under way: an internal-combustion-engine plant; a \$12-million meat-packing plant; a \$6-million ammonium sulphate plant; and two oil refineries, now well advanced, which will cost \$30-million.

• "Soft" Expansion?—U. S. industrialists might be inclined to call all this a "soft" expansion which could flourish only under government protection. But it makes a lot more economic sense than that. Many economists here think that Mexico has a future only as an industrial country.

For one thing, fertile land is so scarce that the country can never achieve a high standard of living as an agricultural nation. For another, Mexican labor is cheap enough to overcome other higher production costs. And—contrary to many an opinion of Latin labor—Mexicans have proved to be highly skilled machinists with the proper tools and training.



EIFFEL TOWER has long been Paris' . .

Aerial Gold Mine

Third-tallest man-made structure has brought in \$10-million in its 50 years-much of it from Americans.

PARIS—The first thing that strikes the visitor to Paris about the city's sky-scraping (984 ft.) Eiffel Tower is its towering impracticality. But this view of the world's third tallest man-made structure (New York's Empire State and Chrysler buildings are taller) is dead wrong. The Eiffel Tower has been a gold mine in the sky ever since it was built for the Paris World's Fair of 1889.

• Million Take—The Eiffel Tower cost 7.8-million francs (about \$1.5-million) to build. It payed off this investment in less than two years from the day the first elevator jerked skywards with the first gaping load of sightseers. Then it went on to take a tidy \$10-million up to the end of last year from a rough total of 20-million visitors—not including the assorted American GI's of two wars.

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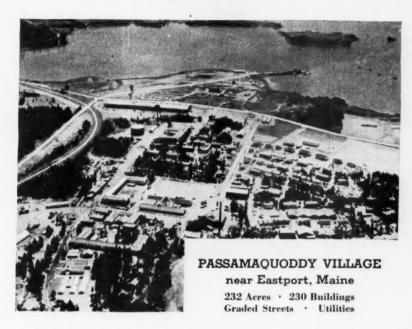
The record for ascensions was set, probably once for all, in the tower's first year of life. More than 2-million people trooped to the top platform—at that time the highest man-made spot in the world.

• Earnings—Last year the tower earned the equivalent of \$385,242 from 958,396 visitors. Of this \$367.675 was for simple ascensions and \$17,567 was picked up by the two restaurants, two bars, and the handful of souvenir shops, telescopes, and other attractions.

This year's scorching summer may have burned up some of France's harvest

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You can now buy the complete village of Passamaquoddy, Maine, or any of its three sections listed below. The village contains large factory space, living quarters for workers and executives, utilities, streets, and fine waterfront area.

On this property are many residential buildings of various types, and industrial buildings ranging from 4,000 to 60,000 sq. ft. Installed utilities include electricity, water supply, sewerage, heating, etc. Convenient transportation is provided by the Maine Central R.R. and U.S. Route 1.

Unit 1 - EXECUTIVE HOMES. Nine private homes on 45 acres of land, overlooking scenic Passamaquoddy Bay. Modern $1\frac{1}{2}$ and 2 story, one-family homes, arranged for comfort and convenience. Utility distribution systems included.

Unit 2 - MULTIPLE RESIDENCES AND INDUSTRIAL AREA. 143 acres, 34 industrial buildings of various types, and 180 multiple dwellings. The homes are 1, 2 and 4 family dwellings, providing a suitable area for workers' housing. The railroad runs along the industrial section. Utility systems for industrial and domestic purposes are included.

Unit 3 - PIER AND WATERFRONT AREA. 44 acres of waterfront property with a 150° pier. On this tract are two small industrial buildings, a house and barn and other minor buildings. The property might be developed as an industrial area or as a storage and shipping terminal.



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DUST and soot are department stores' most unwelcome visitors. The soilage they cause amounts to millions of dollars of loss each year in cleaning bills and mark-downs.

But their way is barred to Best & Co.'s new Manhattan store—the air conditioning system is equipped with AAF Electro-Matic* Electronic Precipitators. Dust and soot can only window shop at Best's from now on.

The benefits of clean air are not restricted to fashionable stores. A steel mill extends the life of its motors; a pharmaceutical plant protects the purity of its products; an auto body manufacturer cuts rejects in its finishing department—all with filtered air.



And only American Air Filter can meet this wide range of air cleaning requirements. Its recommendations are un-



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biased because its line of product is complete. Its recommendations are sound because they are based on over 25 years of successful engineering experience.

It will pay you to examine your operations as to how clean air can save you money. There's an AAF representative in your locality who will be glad to assist you in this analysis. Write today for his name and complete product information.

but it has packed the paying guests into the tower's husky elevators. The total for this year is sure to be over 1-million visitors and earnings may reach \$450,000.

Before the war Andre Citroen, French motor magnate, splattered the tower with garish, Broadway-like advertising. Citroen still has an exclusive contract with the tower but postwar electricity shortages have ruled out such displays. Were they still in operation, the tower's income this year would be even higher.

even higher.

• American

Guests Lead—No exact count is kept of the nationality, age, or sex of visitors. Perhaps the best estimate comes from the bored, dapper barman who pours drinks on the top platform—905 ft. above the Scine. According to his count, about 70% of the people who make it to the top are foreign tourists. Americans head the list—one in every 10 tourists. That means that roughly 100,000 Americans will make the climb this year. Belgians, Danes, Swiss, and British trail Americans in that order.

Since the French franc is softer than the dollar, the pound, the Belgian franc, or the Swiss franc all these can be considered relatively hard and desirable currencies. So the Eiffel Tower earns in the neighborhood of \$300,000 worth of hard currency annually for the French Treasury.

• Little Upkeep—The tower is an extremely efficient money-making machine. It is durable, requires a minimum of maintenance. The wages of half a hundred employees, and food and drink for the bars and restaurants are the two biggest expenses.

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The tower belongs to the City of Paris, which gets a comfortable slice of its profits. But it is operated under concession (running to 1980) by a private corporation called the Societe de la Tour Eiffel, which inherited Gustave Eiffel's original 20-year concession in 1909. Third-generation Eiffels still control a big block of tower shares.

Outsiders aren't told what the tower's net profits average. But it is known that dividends regularly top 20%, rarely have slumped below 10%.

• Gaiety Insurance—Two factors keep profits from mounting even higher—taxes and insurance. Insurance rates are pushed up by the urge which grips a certain number of visitors to hurl objects violently earthwards. Insuring the tower against injuries to pedestrians from hurtling bottles has become a fine art, which reaches its apogee whenever the U.S. Army comes to town and takes over the tower as a nightclub.

For it seems that insurance policies vary with the type of bottles tossed. The tower insured itself heavily against the consequences of falling sarsaparilla bottles in 1918 when the AEF was

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frolicking on it. World War II's crop of roistering GI's was more sophisticated; the tower concentrated its coverage on champagne and cognac bottles.

• American Idea—The idea for the Eiffel tower was originally American. Two American engineers named Clark and Reeves drew up blueprints for a 1,000-ft. tower to commemorate the Philadelphia Centennial of 1874. But the plan never got off paper. A French engineer named Sebillot took the idea back to France and tried to sell it to the French government. He failed. But he succeeded in transmitting his enthusiasm to Gustave Eiffel, who was already famous as a builder of bridges and viaducts. Eiffel had fashioned the metal skeleton of the Statue of Liberty shortly before beginning work on the tower.

BUSINESS ABROAD BRIEFS

A Dutch Eversharp will result from a tie-up between New York's Eversharp, Inc., and International Plastics, of Voorschoten, Netherlands The Dutch company will export to western Europe and Indonesia.

Westinghouse International has an order for \$1.6-million worth of generating equipment from the provincial government of Madras, India. The equipment will go into a 60,000-kva. hydroelectric station on the Machkund River.

A thousand Fiat cabs will be assembled by the Italian auto company in one of the Skoda plants in Czechoslovakia.

Interchemical Corp. has licensed an Australian concern—Sidney Cooke, Ltd., of Melbourne—to manufacture its whole line of specialty inks.

Amsterdam's famous brewery, Heineken's, has set up a joint subsidiary with United Africa Co. (a Unilever subsidiary) at Lagos, Nigeria.

A 2,200-mile tour of U.S. plants will be started next week by 74 graduate students from 22 foreign countries under the auspices of the National Assn. of Manufacturers.

A \$250,000 loan to the Dahican Lumber Co. of Manila has been O.K.'d by the Ex-Im Bank. It will aid production of Philippine mahogany and other hardwoods.

U. S. exports dropped to \$897-million in July. That's almost \$200-million below the June level. Imports also dropped, from \$527-million to \$456-million. Hardest hit: machinery, vehicles, coal, oil.

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The British Crisis and the U. S. Economy

The problem of Britain's solvency is back with us again. Foreign Minister Bevin and Chancellor Cripps dropped it right in Washington's lap this week. It is a problem that we shall return to on this page in the next few weeks.

For most Americans, Britain's new dollar crisis has come as a shock. They were told four years ago that the \$3\frac{3}{2}\text{-billion British loan would pull our chief wartime ally out of the financial hole it was in. Then, when the loan didn't turn the trick, they were told that the Marshall Plan would get Britain—and all of western Europe—out of the red.

So it is hardly surprising that you hear talk like this: More U.S. money will not help Britain any. But if we cut off aid, the British people will come to their senses, get rid of their socialist government, settle down to work, and solve their own problem.

Or, sometimes the talk goes this way: Why bother with more help to Britain. The U.S. is strong enough now, economically and militarily, to get along on its own.

We wish we could believe that it was as simple as that to find the answer to the British problem. It is not. Undoubtedly some Labor government policies, especially in the field of welfare economics, have weakened postwar Britain. Nevertheless, what's really at the bottom of the trouble is the breakup of the prewar pattern of world trade. And the U.S. has a big stake, just as Britain has, in finding a new, workable pattern.

It was American self-interest, after all, that led the U.S. to extend the 1945 loan to Britain. We wanted a strong Britain—to help us recreate a multilateral trading system in the world and to help us contain Soviet Communism. Nothing that has happened since leads us to believe that destruction of the Anglo-American partnership would be any less a disaster today.

Alternatives

Let us look at the economic side first. What are the choices open to us?

(1) The U.S. can continue its efforts to rebuild multilateral trade. That means continued support of the British economy—perhaps even some form of subsidy for another decade. It means, too, measures to increase our imports, unless we want permanent subsidies.

Our payoff would come in a relatively free exchange of goods throughout the world; this would benefit our export industries and would, in the long run, raise our own living standards.

(2) The U.S. can give up the fight for multilateralism, and cut off aid to Britain. This would force the British to seek salvation in a sterling block which would be virtually closed to dollar trade.

The U.S. might react to this British move with a policy of self-sufficiency, letting our exports drop to where they would just balance the essential raw materials we need from abroad. The drop in our exports would,

of course, hurt some American producers, perhaps so badly that they would require special help from Washington.

More probably our reaction would be to wage economic war on the sterling area in order to maintain our exports. By extending "tied" loans—loans granted for the purchase of specific American products—we could hold our export markets without too much trouble, and win our economic fight with Britain hands down. But since few of these loans could ever be paid back—this might well cost us as much each year as the present aid program to Britain and western Europe. Moreover, it would inevitably alienate our transatlantic allies.

It is pretty obvious that the American taxpayer is in for a drubbing whichever choice we make, though there's no way of knowing which would cost him more.

But this we are sure of: The first policy will pay off over the next few years by solidifying our political friendships abroad; if it works, it will pay off over the decades in a wealthier, less insular economy at home.

From the political angle, most Americans would agree that our postwar cooperation with Britain is paying off. Where it has counted most—in the cold war against Russia—we have received steadfast support.

Crucial Question

It is the economic record that makes you wonder. It raises this basic question: Is the multilateral road, based on cooperation with Britain, leading us down a blind alley? In other words, is an economically strong Britain an illusion that no amount of American help can make a reality?

We don't pretend to have a conclusive answer to that question. But we do feel that it is too early to give up the game. The British are a tough race.

There are encouraging signs that even the Labor politicians and planners are having second thoughts about the merits of socialist planning. We applied the British Treasury's decision to make important cuts in government expenditures. And we hope the Labor politicians will have the courage to accept the inevitable and devalue the pound, although we think the U.S. Treasury overrates the net gains to be derived from this step.

Given that kind of situation we believe our Administration should take suitable steps to help cover the British dollar deficit over the next few months. These steps might include: (1) giving the British as big a cut as possible of ECA funds; (2) speeding up U. S. stockpiling of tin and rubber; (3) allowing ECA dollars to be spent for all or part of Britain's 1949-1950 Canadian wheat purchases; (4) renewing Britain's right to draw dollars from the International Monetary Fund.

Then, in 1950, it will be up to the American people and the American Congress to decide on a permanent course. What the course ought to be we hope to discuss in an early issue.



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